COUNTRY LIFE

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KETURAH-COLLINGS.

MRS. LAURENCE CURRIE.

16, N. Audley St., W.



The Journal for all interested in Country Life and Country Pursuits

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THE CARRIAGE . . OF FRUIT.

MONG the subjects to which the attention of Parliament directed at an early date is the carriage of fruit. At present it is in a very unsatisfactory condition, as was shown by a report of the Departmental Committee of the Board of Agriculture appointed by Lord Onslow to enquire into existing conditions of fruit culture. It may, perhaps, be urged that this is a question only of trade interest, but that is not the case. Around London especially the cultivation of fruit alike by amateurs and professionals has increased to an enormous extent during late years, and the effect of the conditions of transport at the present moment are simply fatal to it, as far at least as London is concerned. So much is this the case that the commonest advice given to those who are commencing as fruit-growers is to avoid the London market altogether. The cost of carriage, its uncertainty, and the heavy expenses connected with marketing form an insurmountable obstacle to obtaining a profit. The fruit-grower has to turn away in despair from the greatest market in the world, and, as a conse quence, the vast majority of the inhabitants of London, instead of obtaining the fruit fresh from the gardens and orchards of their own country, have to be content with the inferior sorts brought into the market from foreign sources. A committee has been formed to propagate these opinions, and it is certainly worth noting that the movement is by no means confined to the fruit trade. On the contrary, it has proved attractive to such bodies as the National Federation of Meat Traders' Associations Incorporated, the London Chamber of Commerce, the Federation of Grocers' Associations of the United Kingdom, in addition to associations of fruit-growers, including the Horticultural Trades' Association of Great Britain and Ireland, the Guernsey Growers' Association, the Jersey Growers' Association, the Market Gardeners, Nurserymen, and Farmers' Association, the National Fruit growers' Federation, the National Federation of Fruit and Potato Trades' Associations Incorporated, and the English Grape-growers' Association, all of which societies represent persons engaged in the cultivation of the soil. Nor are they proceeding on any merely vague generalities or undefined discontent. The complaints urged against the railway companies are directed to antiquated classification, unreasonable conditions of owners' risk rates, excessive rates, inadequate

service, late deliveries, and refusal to entertain claims. The question that needs to be asked about any projected reform is whether it is possible to improve matters or not, and in this case there is no room for anything but an affirmative answer. The problem of cheap carriage and punctual delivery has been already solved by the parcel post, and any pertinacious obstruction on the part of the railway companies would give renewed strength to the plea put forward some time ago by Mr. Rider Haggard for an agricultural post. It has to be remembered that the greatest complaint made against the railway company is that the delivery is not sufficiently rapid, and that when a delay has occurred there is no redress, because the companies take full advantage of the fact that goods are despatched at the owners' risk. If we consider, however, how very seldom it happens that even a parcel of considerable weight is delayed in the course of transit by the Post Office, it must be perfectly evident that the railway companies can, if they set themselves to do it, deliver with equal promptitude.

The fruit-growers have found that in negotiations they have

not to do with a single company, but with a combination of companies, acting under the name of the Railway Conference. It is very evident that, if the various lines combine, they are in a position to charge whatever they like for carriage, and that it is useless for the individual grower to attempt to fight against them. Under any circumstances, a railway must, in the very nature of things, be a monopoly, and the Legislature has from the beginning, when Parliamentary trains were rendered necessary, recognised this fact. It is, of course, admitted most frankly that one of the chief objects which the railway company must keep in mind is an adequate return to its shareholders; but it has been proved over and over again that profit does not accrue from high rates, but from large business. It is recognised in passenger traffic that the third class is the mainstay of the railway company, and vegetable produce may very well be called the third class of the goods traffic. We cannot think, then, that it is possible to blame the fruit-growers for tackling the question; their trade is, undoubtedly, crippled and obstructed by the policy of the railway companies, and it is well that the whole subject should be brought before Parliament. For one thing, it gives a splendid opportunity of testing what the new Government is inclined to do for the welfare of the country. Here is a matter which effects one of the great interests of the welfare on both which affects one of the great interests of the working men, both as labourers and consumers. In the old Parliament it was difficult to get through the House a Bill of the kind now projected, because so many members were railway directors, or very largely interested in railways; but in the new Parliament the great majority of those members have been unable to secure great majority of those members have been unable to secure seats, their places being taken by working-men members. It was a reproach against the old Administration that, while devoting a great deal of energy to foreign affairs, they somewhat neglected those of domestic import. Thus a splendid opportunity is offered to the new Parliament of showing that they will reverse this state of things. We do not for one moment wish to suggest that less attention should be paid to foreign policy; but, while that is safe in the hands of Sir Edward Grey, the other Ministers will belie their professions unless they display a considerable amount of alacrity in dealing with such questions as the one able amount of alacrity in dealing with such questions as the one that we have rudely outlined. Already the Liberal Party is committed to a policy of increasing facilities for the growing of home produce, and it is obvious that their labour will be in vain unless something is done to ensure marketing under the most favourable conditions.

In justification of the action taken by the fruit-growers, it has to be remembered that their trade has enormously increased of recent years. When the railway rates for fruit were first fixed, it was a comparatively rare commodity in London. It was necessary to make the rates high, because it is very obvious that the charge for carrying a short and irregular supply must be very much greater than that for conveying in bulk. It is a well-known principle of railway policy that the full truck is the most remunerative. The empty or half-empty one is as expensive to keep up, and requires as much steam to drive it, without yielding the same return. Within comparatively recent years the transport of fruit has grown to be a very large and important department of railway work. It has still enormous possibilities of extension, and the policy now being urged upon the railway companies is really the one from which they have derived most benefit in the past. So far from the Bill being brought forward in anything like antagonism to them, its passage is certain to redound to their interest.

Our Portrait Illustration.

UR frontispiece this week is a portrait of Mrs. Laurence Currie. Mrs. Currie is the daughter of the Right Hon. George Henry Finch of Burley-on-the-Hill, Rutland, and her marriage to Mr. Laurence Currie of Minley Manor, Hampshire, and of Coombe Warren, Surrey, took place in 1895.



COUNTRY ·NOTES ·

T Westminster during the present week the business of swearing in members has been the chief one, and people are all discussing the prospects of the session that has now opened, and the legislation which is likely to be produced by the present Government. Happily, there is one subject on which no difference of opinion has been expressed; this is the election of the Right Hon. J. W. Lowther to the important post of Speaker of the House of Commons. It is one of the fine traditions still lingering round Parliament that the Speaker, from whichever side he may come, is independent of party, and is accorded the support of every member of the House. Since Mr. Lowther's election he has discharged the duties devolving upon him with a firmness and impartiality that have won the admiration even of those who used to be his political opponents. One of the most important of the Liberal papers says: "He has signally distinguished himself by his strict impartiality and unfailing courtesy to both sides of the House. His kind and genial personality makes him very popular." During the preceding Parliament the Conservatives yielded the same loyal recognition to the qualities of Mr. Gully, the late Speaker, now Lord Selby, and we hope it will ever remain so. The justice and forbearance with which Parliament discharges its duties depend to a large extent on the character of the Speaker.

There are one or two points connected with country life—of what we can scarcely call minor importance—that one hopes to see attended to by the new Government. One is the encouragement of small holdings as a check to that depopulation of the rural districts which has been going on with accumulated force during the last quarter of a century. Lord Carrington will greatly disappoint his friends on both sides of the House if he fails to produce an effective measure that will do what one of his predecessors—Mr. Chaplin—attempted many years ago. As he is himself a landowner, we scarcely think it need be feared that he will overstep the limits of meum and tuum, always a menace when a party has Socialism as one of its wings. On the other hand, the most enlightened of his opponents will not quarrel with any thorough-going scheme, so long as it does not overstep the bounds of justice. Many of the statements made by various members of Parliament show that they have a great wish to do something towards directing people back to the land; at the same time, not having gone so thoroughly into the facts of the case that they know what is and what is not practicable, we may expect that any scheme will be subjected to a sifting and useful discussion.

Another matter is one to which we made brief allusion last week, viz., the treatment of the Building Bye-laws. It has now been admitted by nearly all the public bodies qualified to give an opinion that it is necessary to do something, and, as we said last week, the official Chamber of Agriculture asked that the present bye-laws be done away with altogether and an entirely new set be drawn up as substitutes for them. We have no dubt this is the better plan to pursue. So many discoveries and improvements in sanitation have been made since the existing Model Building Bye-laws were originally drawn up that they have become obsolete by the mere lapse of time. The propounders evidently thought that far back in the seventies the last word had been said about sanitary science, and that it was possible for them to draw up bye-laws on the assumption that nothing could possibly arise to disprove the theories then generally

held. In addition it is usually recognised that the bye-laws are too arrogant and dictatorial, while it is no secret that they open the way to the corruption of the smaller officials employed. The surveyor of a local authority is not in every case a fit and proper person to decide as to whether a building is adapted for habitation or not.

In this connection the Right Hon. John Burns will be upon his trial as head of the Local Government Board. The subject is one on which we do not recollect that he has made any public utterance, and therefore he may be expected to bring an open mind to its treatment. We hope that those who have taken an active part in trying to bring about this necessary reform will give him a fair and impartial hearing. Labour members have not in the past given much attention to this side of cottage-building, though it is one closely connected with their interests. The farm servants and others who live in the country fully realise the advantage of occupying a little house with a piece of land adjoining, and there is no doubt that they would much prefer each cottage to be isolated from its neighbours. One of the dreariest sights to be seen is a long terrace of wretched workmen's cottages set up just as if they were in the midst of a crowded town area, yet standing on land which during the last twenty-five years has depreciated enormously in value. Ministers of Elizabeth drew up an Act to ensure that every new house should have a certain amount of land attached to it, and in this they showed greater wisdom than the legislators of our own generation.

THE COMING OF SPRING.

She came with a rush of sleet, and shine,
Of azure, and wind-swept air;
Thrust in her bosom a celandine,
And a daisy caught in her hair.
The sheep, and their wee lambs saw her pass,
(And a lark as he trilled aloud!)
Her bare cold feet in the sunlit grass
Or the shade of a passing cloud.

The chaffinch already had brighter wing,
More glossy the rooks, and the daws;
The tiny wren had begun to sing,
The sparrows were busy with straws.
The thrush, and the blackbird swelled into song
(Like wine the chilly sweet air!)
A sun-bright Goddess she swept along
With the joy of the wind in her hair!

ROSAMOND NAPLER.

All who are interested in the national sport of yacht-racing will receive with satisfaction the announcement that the International Conference convened to agree upon a common rule of measurement, and a uniform list of classes for all countries, has arrived at a unanimous decision on the subject. Not only will this result in a removal of the state of uncertainty which has prevailed for so long, and which has tended to lessen the popularity of the pastime, but it is clear that the new rules should encourage the building of a better type of yacht, and one on board which the owner may live in comfort and entertain his friends. Moreover, the international character of the new rules should have the desired effect of removing the disabilities under which our yachtsmen have laboured when attempting to enter their yachts for races abroad. The two forms of yachts which will be taxed under the new rules are the fine-bodied vessel, and that which has an overhanging bow; in short, all vessels with fin keels, bulb keels, long overhanging ends, and flimsy construction—machines only suitable for racing—should now disappear. The vessel which should result will, it is believed, have a character between a racer and a cruiser, with compact and moderate dimensions, a fairly full body, and adequate cabin accommodation. It has been further decided that the new rules shall be enforced until December 31st, 1917, but that old boats may be permitted to race under special conditions until the end of the year 1909.

The trial of an armoured motor-car at Paris is an event that is likely to have considerable influence on the next war. It will be remembered that an important part was played by the armoured train during the siege of Mafeking, and in the course of the Japanese war with Russia motor-cars of a more or less protected description were employed to a considerable extent. But the new vehicle represents a vast advance on anything that has been done before. It is built, by the by, for the Russian Government, and may therefore be said to be the result of the experience of the last war. It is bullet-proof and shell-proof, and at the trial attained a speed of 28 miles per hour. The weight of the car is 30 tons, and it is of 30 horse-power. It is armed with a small quick-firing swivel gun, which can discharge 600 shots a minute in any direction. In order to cross water, a

folding iron bridge is carried. One can easily imagine that this would be a formidable weapon in the wars of the future, particularly if the next great contest should take place in the Low Countries, which have been called the cock-pit of Europe.

Statesmen and others who are interested in public affairs have recently been devoting a large share of their attention to the new movement which has begun in China. Perhaps there is a disposition in some quarters to regard it in too ominous a light. The West has so long led the van of civilisation that the white man has come to regard himself as infinitely superior to the coloured races, and, as it were, fated by Destiny to rule over them, even though their numbers are so greatly in excess. Hitherto the darker races have acquiesced in this view of their situation with an almost fatalistic composure; but the victory of Japan over Russia has inspired them with new hopes. China, therefore, following the example of her smaller neighbour, has begun to put her house in order. Only the observer from the West sees that she does not recognise how much wants doing. It is doubtful whether the Chinese will submit, with the patient abnegation of self and determination which enabled Japan at one bound to come out of mediævalism into the very van of civilisation, to sink all other considerations before the welfare of their country. It means that if China were to carry out her scheme, not only would the military forces have to be remodelled, but the civil institutions would, to a large extent, have to go into the melting-pot. The danger is not that China will undergo regeneration, but that, deceiving herself, she may fancy that after making a few changes, her position is equal to that of Japan, in which case very troublesome complications might ensue.

In one of the Trade papers there is a statement which seems to throw a very interesting side-light on the problem of the unemployed. The writer says, "It is an everyday experience that the scores of applicants for shop vacancies advertised in the newspapers do not contain a single competent man." He goes on to point out that a supply of young men is a crying need of the engineering trade of to-day. Whoever has found it necessary to apply for workmen of any description will be in a position to endorse this experience. What we find is that there exist a vast number of unemployed floating about in every direction, but that competent men are very difficult to find. The inference would seem to be that it is the unskilled who fill the ranks of such processions as may be seen from time to time winding along from the Embankment to the Park. If that be so, the argument from it for increased technical instruction in our elementary schools gains very much greater force than it did before.

A state of things demanding explanation is that which is threatening paralysis in the boot trade, namely, an extraordinary scarcity of leather. The shortage is being particularly felt in Leicester, where bootmaking is the staple trade; where, indeed, it is said that more leather is consumed than in any other part of the United Kingdom. The scarcity is difficult to account for; some attribute it to the great demand that arose in Japan after the conclusion of the war, which has taxed the American market, whence most of our supplies are obtained. But one would have thought, from the greatly-enlarged trade in dead meat, that hides of all sorts would be more available than is the case. Organisations of those who sell boots and shoes help to make the scarcity more apparent. It is a custom in the trade for one firm to have a great number of shops, often as many as 400 or 500, where ready-made boots and shoes are sold. Naturally, their contract orders are immense in extent, and it will be most embarrassing if they cannot be fulfilled. Some, we learn, anticipated the scarcity, and laid in unusually large stocks in order to prepare for it; others were not so provident, and the consequences are likely to be disastrous. You cannot make bricks without straw, nor boots without leather, and what is happening is that many manufacturers are being threatened with bankruptcy owing to the difficulty of obtaining the proper material for their work.

Most of us are familiar with the famous picture which used to be so often engraved, "Lochaber, no more!" where the despairing emigrants evidently looked upon the voyage to another land as a last and desperate resource. It was not so with the first batch of emigrants which under Lord Rothschild's scheme left Tottenham on Monday night. Their gaiety and cheerfulness left the observer no other conclusion than that they saw behind unemployment, and hardship and distress, while their imagination pictured the West, in the words of the old song, as a place where "a man is a man if he's willing to toil." It will be very interesting to watch the final effect of this movement. The scheme has been very carefully planned, and if the emigrants are true to the obligations into which they have voluntarily entered, it will in the end cost nothing, since each signed an agreement to refund his passage money at the rate of 30 per cent. of his monthly earnings, so that the £5,000 which is the capital on

which the movement rests might, under favourable circumstances, remain intact, and be again used to send another batch out to Canada. The scheme opens out a prospect of new life to these unfortunate waifs, and we trust that at least a large majority of them will become useful and self-supporting citizens of the Dominion.

Signs of spring are evident in garden and woodland, and clouds of colour will soon take the place of the sturdy little sheaths of tulip, daffodil, and hyacinth now spearing through the soil. The metropolis owes much of its spring beauty to the free planting of bulbs in its numerous parks, and some idea of the vastness of the undertaking may be gained when it is mentioned that over 100,000 tulips, representing forty-two varieties, were planted last autumn. The beautiful daffodils Emperor and Grand Monarque will flower in their thousands, too, and in a few weeks about 19,000 snowdrops, 18,000 hyacinths, 10,000 bluebells, and smaller quantities of lilies, windflowers, and gladioli will be in bloom. The London County Council, by making the open spaces of the metropolis brilliant with colour from spring until autumn, is accomplishing a useful and inexpensive work. The cost of these thousands of bulbs was only £479, a small sum considering the immense enjoyment afforded to the public.

THE OPEN GATE.

The privet near my unlatched gate
Breathes heavy fragrance to the air;
Early I watch the road and late
For her slight shadow falling there.

It seems sometimes that I can hear The quick tread of approaching feet, As though indeed she might appear Across white mists of meadow-sweet.

So long it is since first she went Down that far-reaching silver way, When the pale April sunlight lent Its glory to the spring's array.

The roses round my window bloom
Where every night my lamp doth burn;
No blinds obscure the little room
Lest darkness greet my dear's return.

The gate unlatched—the door ajar— The windows open, blinds undrawn, Lest she should come from very far And I not hear her cross the lawn;

Let she should come—I ask not how—
Back to the heart that loved her so:
It were no use they tell me now . . .
She would not hear, nor see, nor know.

ISABEL CLARKE.

Of course "one never knows" is always a true saying, and rever more true than when said in reference to the craft of the angler; but, if present signs go for anything, this should be a good season with the Norwegian salmon. There is about a foot of snow, according to the latest accounts reaching us, on the lower levels in the Namsen Valley, for instance, and this indicates a sufficient fall higher up to put the rivers into good flood. If any inference is to be drawn from the Scottish rivers which have already opened, it is a most hopeful one, for the early angler has seldom been more successful. But the experience of Norway last year, when all looked so well, but so few fish came up, does not dispose us to very optimistic views, in spite of the favourable omens.

The problems of road repair differ a good deal in different parts of the country with the relative ease or difficulty of getting good road making and mending material, but there are few parts in which these problems have not been affected by the more general use of motors. Generally speaking, the heavy motors work the sides of all narrow roads more severely than the horse-drawn traffic, but do not wear the crown of the roads at all; and though we hear much complaint of their damage, it is doubtful whether the fact that they spare the crown, and so do not knock the shape of the road about, does not give them a better account to their credit on the whole than the lighter traffic, which does almost its worst damage to the crown. The ordinary pickaxing of the upper side of the rut into the cavity which is the simplest form of repair on country roads, doe not meet this damage in the best way, for it involves a disturbance of the crown, which is unnecessary; though wher the crown has been worn hollow by the horse's hoofs it has the effect of restoring the shape to some extent. The best way to deal with a motor-worn road is to put the very best new material that can be obtained on the lines of heaviest wear, and the extra expense which this entails will be compensated for by the saving in the repair of the crown.

Carlyle in his con-

temptuous way called view-hunt-ing. There is as

ing. There is as usual a middle path

between the two extremes. In one mood, or at one

time, we may enjoy to our heart's content the view

afforded by an

eminent situation. We may feel the glamour of the

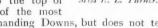
glamour of the misty mountain top, the distant to ver hanging wood, the plain stretching away until it is lost in

distance, the faroff water with a gleam of sun-light on it; but

that need not

THE BEAUTY OF FROST.

RITICS very often brought an objection to the work of Richard Jefferies to the effect that his observation was, like his eyes, short-sighted. He concentrated his attention on and vividly described the minute beau-ties of the field and hedgerow, the flower and leaf and opening bud, but his vision did not extend to the distant and large prospects. In "Wild Life in a So u the rn County" he takes us to the top of one of the most





WITHERING THE HEDGEROW.

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one of the most commanding Downs, but does not tell us what it commands. Apparently his eye did not rest on the far champaign at his feet, the fertile and diversified fields of Wiltshire, over which the windhover from the Downs hung in the air. What he did see were the tumulus at his feet, the thistle-down blown about by the wind, and the white butterflies. Curiously enough, if we turn back some fifty years before the time when Jefferies lived, we shall find that the opposite fault was prevalent—that writers on Nature, and novelists who introduced Nature into their stories, were addicted to what

prevent us from obtaining an equal delight from those more minute objects which require close observation before their beauty is revealed. Nothing is more exquisite, for example, than those early growths which may be described rather as premonitions of spring than as evidence of its arrival, the first tender spear-shafts of green extruded from the moist earth, the first burgeonings of the hawthorn hedge, the first fair and delicate flowerets that peep out of their earthen bed before the snow is gone or the frosts have ceased. No doubt it is to some extent association that lends them glamour. It is one of the



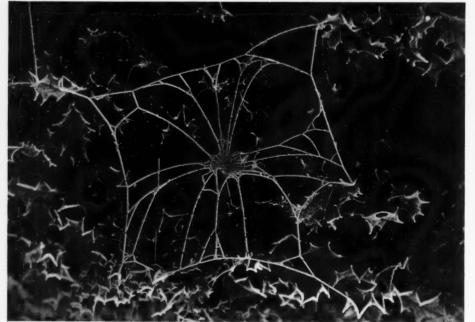
Mrs. Deives Broughton.

THE SILVERING FROST.

primary instincts to rejoice that the sleep of winter is broken, and the time of the sleep of winter is broken, and the time of the singing of birds is come again. We love the loud strong note of the storm-cock not because it is more melodious than that of the minstrels who later on will make the thicket and hedgerow resound with their music, but because it tells of approaching spring. To pursue this line of argument would lead to identification of the principles of beauty with utility. That, no doubt, was the older idea. Our forefathers thought that everything was ugly which tended to discomfort. What constantly struck them about mountains was their desolation. Moorland suggested thoughts only of barrenness and poor living, and the sea ideas of cruelty. It was the hungry sea and the ravenous sea, as well as the unharvested, the many twinkling, and the wine dark.

In the pictures which we show today are good examples of beauty completely divorced from mere utility. Snow and frost are the recognised enemies of comfort. At their approach, life retreats to its inmost citadel, vegetation dies or withers, and the spirit of man becomes depressed; so that commonest synonym for bleek old age

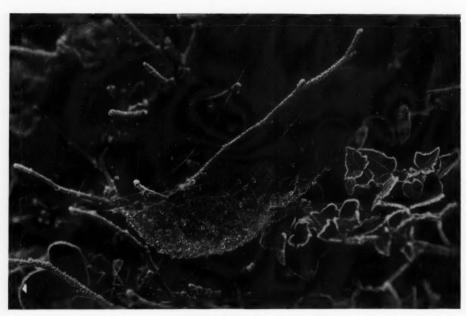
tion dies or withers, and the spirit of man becomes depressed; so that winter has become the commonest synonym for bleak old age. It is, however, a sign of advancing civilisation that our ideas of beauty are no longer confined to the obviously useful. It is true that to-day, as much as in the "Hungry Forties," a farmer of the old school thinks that no landscape is more beautiful than one waving with yellow wheat; but Wordsworth and those that came after him showed that there was no landscape so desolate but that it possessed a beauty of its own. But it requires no great amount of philosophy or poetry to discern how exquisite are the effects produced by the frost. Those only know them, however, who are capable of rising in the early morning. It is cold, but if the sky be clear and the air still, one does not think of that. Under such circumstances to view the rising of the sun is itself worth the trouble of getting out of bed. First there are those streaks of light in the east that caused Homer to call dawn the "rosy-fingered." Then all at once, as it were almost with a leap, the great red ball of the sun arises out of the horizon and looks down on a world whitened with the rime of the night before. At Christmas pantomimes we have long been accustomed to see imitations of the effects produced by frost, but pretty as they are they give little idea of the beauty of the real thing. Nature cares nothing what materials are put in her way, and it is curious to note that some of her prettiest effects are produced on what obviously was most remarkable for its ugliness. For example, the wire-netting which in these days of poultry-breeding and pheasant-rearing is so plentiful about many country homesteads, cannot by any figure of speech be said of itself to add lustre to the charm of the country cottage; but when the frost has been at work it



Miss E. L. Turner.

RIME ON A SPIDER'S WEB.





Miss E. L. Turner.

FROZEN DEW.

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would appear as though the pens that are ordinarily absolutely squalid are transformed into what might be the court of a fairy palace, hung round with lacework so delicate and beautiful that no human hand could produce the like. And this lacework frost has proceeded to hang on the field hedgerows, and on the trees that she has stripped of leaves, till they stand clear and tall and stately in the cold winter light. On the habitations of man is thrown the same mantle that envelops the hedges and trees, so that a certain uniformity of grey pervades the whole landscape, as though it had been painted by an artist of the school of James MacNeill Whistler. In the distance, too, it darkens the landscape so that copse and spinney stand out somewhat heavily, but near at hand soft is the colour, delicate the tracery of the web that frost has woven during the watches of the night. Of course, we are not speaking of a long spell of hard weather. It is such a time since a prolonged frost was experienced in Great Britain that the effects are well-nigh forgotten. These are some of the effects of frost on trees and other natural objects; but to speak in the language of political economy, the raw material of frost is water, and some of its most striking effects are achieved by the river. The temperature has not yet been so low as to produce anything approaching to that ice on which on a historic occasion oxen were roasted whole. Indeed, up to the moment of writing there has scarcely been sufficient to afford skating. But, perhaps, the prettiest effects are due to the light frosts. Over the river with which we are most familiar unpruned willows bend and wave, and their supple branches seem to lend themselves particularly well to the formation of that tracery which the frost accomplishes. On either bank there is a margin of thin and rustling weeds. They

margin of thin and rustling weeds. They have been submerged under flood water and blown upon by the wind until they are dry and whistling; yet on them, too, the frost casts its delicate white garment, which at this season of the year only endures until the moment when the sun comes out in his strength. Then, like the Princess in the fairy tale when she has lost her slipper, their exquisite robes are laid aside, and once more they are only bending shadows by the water, which one can easily imagine are mourning the departure of that time last year when their veins were filled with sap and they formed a green and healthy border to the dark water flowing between opposite banks.

One of the most pleasing effects produced by mist and frost is out of the range of the photographer. The writer calls to mind a spell of frost in one of the Western Counties that occurred many many years ago. A very slight fall of snow was on the ground, and with the hard frost came a thick fog that seemed to envelop althings, though when one was near a hand it was apparent that tree and shrub and even flowers had been frozen over with rime that lay thick

as snow on twig and bough. It ought to be explained town where this occurred lies in a sheltered valley. The Cotswold Hills are on three sides, and on the fourth rise the Malvern Hills. It was proposed that we should drive to the top of the eminence what prospect was stretched below. No sooner said and see what prospect was stretched below. No sooner said than done. He that made the proposal was seated in a dog-cart with a thorough-bred in the shafts; so off we went. On climbing the eminence it soon became evident that the fog was one of those mists that cling to the earth. In a word, we got above it, even as a balloonist is able to rise above the clouds. And how

one or two cases we hear that the younglings have been afflicted with scour, in others the exceeding moisture in the month of January developed premature rheumatism and stiffness, complaints very difficult to get rid of. The percentage of ewes that have died is not very high, the reports from several farms showing that it is about 2 per cent. Last year was not a very good one for turnips, and the consequence is that during the severe weather we have been experiencing greater demands than usual have been made upon the hay. Of course all this refers to the South of England. In the Midland Counties the lambing is just beginning, and it will

be some time before it gets into full swing in the North, though a corre-spondent from the Scottish Border informs us that this year several lambs have come wonderfully soon. On one farm three ewes had lambed in January, a very unusual occurrence so far North.

Horse-Breeding.

The publication of the new volume of the Stud Book of the Hunters' Improvement Society reminds us that we have no recognised breed of hunters. If a man desires to produce a Shire horse or Hackney or a polo pony, he horse or Hackney or a polo pony, he knows how to set about it. Judgment, care, and the combination of the right strains of blood produce at last the type required. But hunter-breeding, after all the century and a-half of demand created by fox-hunting, is still a matter of chance. We desire to breed a horse able to carry last to bounds. a horse able to carry 14st. to hounds over a country. We often have on our hands a coach-horse, a moderate

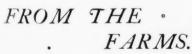
trooper, or, at the worst, a mere vanner. In any case, we have an animal barely worth from £30 to £40 at four years old. But if hunter-breeding is to pay, we ought to obtain £60 to £80 for our four year o'ds. Yet, in rather less than a decade, the Polo and Riding Pony Society have produced an animal of the polo type. They have succeeded where hunter-breeders have failed. Nor is this all. The polo pony is nothing but a hunter of the best type under fifteen hands. It is clear that, by following the same lines, we ought to produce a hunter. What, then, is the secret of the polo pony breeders? First, the mares. polo ponies of our time have been mares, and of these some of



NATURE'S EMBROIDERY.

beautiful it was on the hill-top. The sun shone as clearly as he does on a midsummer day from a sky of unclouded and ineffable blue. But the picture lay below. The valley was filled with mist that resembled nothing so much as a wan and desolate sea. To make the illusion complete, a breeze that could not be felt at the top of the hill blew over the fog and produced the same effect as it might have done on a real sea. That is to say, it raised waves exactly like those on the ocean, except that they were thin and phantasmal, resembling nothing so closely as the ghosts of real waves. They rolled upon what seemed the

great plain below and against the Malvern Hills, which fancy easily changed into a rocky coast; they broke in fine clouds of spray. listened instinctively for the noise which ocean invariably makes, but nothing was heard except the whistle and rush of the train passing through the valley. It was hard to believe that the sea was not real.



PROSPECTS IN FEBRUARY.

N the whole it is considered a matter for satisfaction among farmers that the weather took a turn towards stormy early in February. The green crops were advancing prematurely, and getting into a condition in which they were bound to surfer severely from the frosts that are

surfer severely from the frosts that are inevitable in late spring, if they do not come earlier. A decided and wholesome check has been given to their Miss E. L. Turner. growth, though at the same time the frost has brought outdoor labour on the farm practically to a standstill. Ploughing and sowing cannot be proceeded with, and in this respect the fields are much further back than they were at the same period in 1905. The most interesting event of the moment is, of course, the lambing. It has turned out moderately well on the majority of farms in the Southern Counties, thereby affording one more proof that the best preparation for a good lambing season is a fine autumn. Nevertheless, a number of casualties have been reported. The typical report shows that a good percentage of lambs are twins, but in report shows that a good percentage of lambs are twins, but in



NATURE'S SILK AND LACE.

the most notable have gone to the stud. Then comes pony blood. Quite 40 per cent. of our polo ponies have Welsh or Irish pony blood in their veins. Two strains of thorough-bred or Arab and one of native pony, with careful selection as to size, produce the polo pony; why not the hunter? The absence of the size limit would seem to make this easier. At all events, it is worth trying, the two leading principles being the retention for stud purposes of the best mares (i.e., the best performers in the field), and the modification of thorough-bred blood by an infusion of pony strains.

PRIZES WITHOUT SHOWS.

PRIZES WITHOUT SHOWS.

We touched lightly on this question in these columns a fortnight ago, and it may be now interesting to note that, in the new programme for the Bath and West of England Show at Swindon, two classes will be found for dairy herds. The classes are numbered 113 and 114. In the former the qualifications of the eligible herd must be that it contains at least forty cows, and is situated in the counties of Wilts or Gloucestershire, or within twenty miles of Swindon. The other class is for herds of between twenty and forty cows. The object, of course, is a very plain one. As long as cows are brought together at great shows and judged by herds, the criterion applied to them will be one of points; but it a system of inspecting the herds in what we may call points; but if a system of inspecting the herds in what we may call their work-a-day clothes were adopted, and the test applied were of a practical nature, the new system must inevitably lead to a vast improvement in the herds of Great Britain. Our Imports.

The astonishing bill that we pay foreigners for our food is signally exemplified in the Board of Trade returns for January. One wonders whether the increased quantity of food is a sign of greater prosperity; whatever be the truth in regard to that, it is certain that the quantities keep increasing at a very high rate. In January we bought more French beef and French mutton than we had done for the same month in either of the two preceding years; we purchased about the same quantity of bacon and hams, and if all dead meat were reckoned together,

the month would have beaten the record, the importation amounting to 1,063,400cwt. At the same time, we were consuming amounting to 1,063,400cwt. At the same time, we were consuming far more foreign and colonial butter, margarine, and cheese, while eggs bought from abroad continue to increase in quantity, despite the efforts to stimulate home production. Denmark supplies us with more eggs than any other country, Belgium coming next, and Germany third. At one time the place of honour was held by France, and at another by Russia; but these have all been beaten by Denmark. Of course a very large proportion of these eggs are used in factories and restaurants; but even when a liberal deduction is made on this account, it is evident that the vast is made on this account, it is evident that the vast proportion of the eggs used at British tables come from abroad, particularly during the winter months. The truth is abroad, particularly during the winter months. The truth is that our instructors in poultry-keeping have not yet devised a sufficiently cheap and simple plan for producing eggs in winter. We can get them easily enough if we are prepared to go on regardless of expense and trouble; but the majority of poultry-keepers do not care to do this, because sufficient returns pointry-keepers do not care to do this, because similarit returns are not forthcoming, and the consequence is that the market is still largely in the hands of the foreigner. Denmark, again, sends us more butter than any other country, Victoria coming next, and New Zealand after that. It may be interesting to note that last month we spent upon dead meat the gigantic total of £4,426,360, which is, we think, a record for the month. In this total we include imported poultry, and dead rabbits In this total we include imported poultry and dead rabbits.

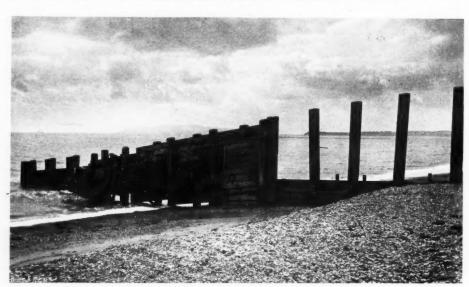
COAST EROSION AND FORESHORE PROTECTION.

HE subject of coast erosion is one of perennial interest; year after year the sea is ceaselessly eroding our coasts. It has been estimated that every year England loses an area of land equal to the size of Gibraltar. According to the returns of the Board of Agriculture, the area of our islands is steadily decreasing; in 1867 they gave the area of Great Britain as 56,964,260 acres, and in 1900 as 56,782,056 acres, making a loss of 182,204 acres in thirty-three years; but it must be borne in mind that these figures include land reclaimed from the sea, and therefore the loss is really greater than the figures given would indicate. The sites upon which stood many important towns and villages on the East Coast are now covered by the sea. The case of Dunwich may be mentioned as a notable example. Beccles Willson, in his "Story of Lost England," referring to Dunwich, says, "The ruins of a solitary church of large dimensions, toppling on the edge of the

cliff, are the only existing memorial of the ancient city, 'surrounded with a stone wall and brazen gates,' which boasted fifty-two churches, chapels, religious houses, and

which boasted hity-two churches, chapers, tenglous nouses, and hospitals, a king's palace, a bishop's seat, a mayor's mansion, and a mint; as many topships as churches."

The question of coast protection is naturally one of great interest and importance. In the past it has been found that many of the works erected to prevent erosion have had the effect of increasing it; such results have been caused by high and massive groynes running a short distance seaward, which, while accumulating some material on one side (according to the direction of the prevalent wind), inevitably cause scour on the other side. In addition, such works are very costly. It pays an owner of agricultural land better to abandon his property to the unchecked ravages of the sea than to erect property to the unchecked ravages of the sea than to erect such structures. The object of high groynes was to stop the drift of material, especially shingle, along shore. In 1894, the late Mr. Edward Case introduced, at Dymchurch, his well-known system of shore protection by means of long, low, adjustable groynes. The Dymchurch wall protects 24,000 acres of valuable agricultural land from the sea, the land being from 4ft. to 10ft. below high-water level. From 1874 to 1894 low-water mark had advanced 300ft. landward, and, notwithstanding the fact that £70.000 had been spent during this time standing the fact that £70,000 had been spent during this time in protective works, the sea threatened to inundate the marsh. After studying for some years the problem of coast protection Mr. Case came to the conclusion that the sea had a constructive as well as a destructive power, and could be made to build up a natural defence of beach and sand. He observed the large amount of sand, travelling below mean sea level, held in suspension in the water by waves and currents, and this he set himself to collect. The great difference



HIGHGROYNE. DISMANTLED

between the Case groynes and the ordinary high ones is that the accumulation, if any, effected by the latter is usually of the nature of shingle, which is intercepted in its movement along the shore bottom, the fine material escaping round the lower ends; whereas the Case long low groynes not only collect any material drifting along the shore, but, by slowing down the along-shore currents, cause the fine sand held in suspension in the water to be deposited on the shore, which is, therefore, gradually built up, and a natural protection formed. It is essential to extend the groynes to low-water mark, and in many cases they should be carried further seaward in the form of submerged groyning, as there is a maximum amount of saud held in suspension in the neighbourhood of low water. The Case groynes are kept low, and accumulate evenly on both sides, therefore a lighter and cheaper form of construction can be adopted than in the case of high groynes. Mr. Case devised a new method of construction; holes are dug in the shore about 7ft. 6in. apart, in which the uprights or piles are placed; the holes are then filled with concrete. The planking is inserted horizontally between the pairs of uprights. This method of construction was used at Dymchurch with great success; about of construction was used at Dymchurch with great success; about 66,800ft. run of this groyning has been put in. The success of the system at Dymchurch is well illustrated by the fact that after a ten years' trial (1894 to 1904) the "Level" of Romney Marsh recently put in about 14,000ft. run more groyning, extending the system westward of Dymchurch. The shore level has on an average, been raised 4ft. 6in. in height, the accumulation amounting to over 1,500,000 tons. The success of the worl at Dymchurch has led to the adoption of this system in many places in England, and also in Ireland and Belgium. The same places in England, and also in Ireland and Belgium. method of construction as above described was generally used.

and while the results of the works have invariably shown the principle of the Case system to be the only correct one, the method of construction has not always been a success. The groynes have in several places not proved strong enough, and in addition the wood piles and planking have in places been badly attacked and eaten by marine worms, causing them to break off and be washed away. This has, however, now been remedied by the invention of the new ferro-concrete groynes by Dr. J. S. Owens. Reinforced or ferro concrete is a comparatively new material, formed by a combination of concrete and iron or steel bars embedded therein. This material has many advantages over wood for marine work. It cannot decay or be attacked by marine worms, it is much stronger and heavier than wood, and will better withstand violent blows without damage. Many marine works have already been constructed of ferroconcrete with unqualified success. For groyning works there is an advantage in the fact that beach and sand, the chief materials required for the construction, can generally be obtained from the shore. The ferro-concrete groyne is shown in the rest of our illustrations; the piles or uprights, which are either set in concrete or driven with a pile-driver, according to the nature of the shore bottom, have a groove on either side, and the slabs, which take the place of planking, slide between the piles in these grooves. No fastenings of any kind are required between the planks and piles, as the ferro-concrete is heavier than water.

The cost of these groynes compares favourably with the cost of wooden ones. Those erected by the Board of Trade at Spurn Point work out at about £2 per foot run; the Case wooden groynes at Deal were constructed at a contract price of 12s. per foot run; but the contractors lost money over the work. The cost of the ferro-concrete groynes will vary from 9s. to 22s. per foot run. It is therefore now claimed that at a reasonable cost permanent protection can be obtained against the ravages of the sea, by the application of ferro-concrete groynes on the Case or low system. The method of fixing the piles in the shore can be varied to suit local circumstances, as can the length, direction, distance apart, etc., of the groynes, making the system adaptable to any shore where erosion is going on.

Gerald Oliny Case.

WILD COUNTRY LIFE.

SIGNS OF RETURNING SPRING.

"Once more the Heavenly Power makes all things new, And domes the red-plowed hills with living blue; The throstles have their will—the Poets too."

S a matter of fact, the blue is not yet very living, but dead-alive at best, and thin and greyish; but when the calling of the young lambs comes down the keen wind across the field; when almost all the birds we see are going in couples; when the snowdrops are nearly over and crocus buds are swelling visibly; when the thrushes are singing from every tree, and the bell-like spring note of the great tit is making the spinney ring—then it is idle to pretend that we have not fairly started on a new year, no matter what February frosts or March storms may lie ahead. "For at thy chuckled note, thou twinkling bird, the Fairy Fancies range"; but what interests me most, and most convinces me that the business of spring has truly begun, is that the rooks are at their annual, and to me quite inexplicable, goings on in the elm tree.

THE ROOKS' PRELIMINARIES.

The elm tree stands in immediate contiguity to the house, while the rookery proper is 100yds. or more away—not much of a rookery, for these

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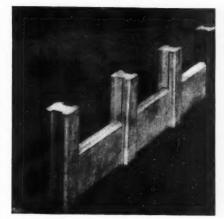
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many years back it has remained curiously stationary at from fourteen to eighteen nests. About the January, each winter since that of 1900, the birds from the rookery have come to hold conventions the elm tree. Vear after vear I had no doubt that they were discussing the eligibility of the site for a new colony, and every year I looked for them to begin building; but evidently there was some drawback to the tree from



THE "CASE FERRO-CONCRETE" GROYNE.

the rooks' point of view. What it may have been puzzles me, for it is eminently commodious, the air must at least be as bracing as in the rookery Iooyds. away, and the view is magnificent; but for four successive years, after most elaborate conferences—held once or twice a week throughout February—he motion to build in the tree was evidently put to the vote and lost. For four years, I say, because in 1904, after I had quite made up my mind that the proceedings would be as futile as those of the preceding winters, what was my astonishment when early in March a pair took possession of the tree and formally went to housekeeping!

A CO-OPERATIVE HOME.

The morality of rooks and the ordering of their domestic affairs have log been the despair of naturalists, and I am bound to say that the operations in connection with the building of that nest were most irregular and at time-even scandalous. I do not know what the wood-pigeons in the ilex close by must have thought of them. How many rooks had a beak in the making of the structure it is impossible to say, for rooks at the top of a tall elm tree are not easy to tell apart, and I never actually saw more than five at work simultaneously; but, in the constant coming and going, it is possible—and I am inclined to believe—that twenty or more at one time or another lent a hand. Of the rules or conventions governing the proceedings some appeared to be intelligible according to human canons, and some were not. There was, of course, a legitimate par to whom the house really belonged, and so long as both those birds were at the nest, no bystander offered to help. There might be two or three others sitting about in the branches a few yards away, each with a stick in its mouth and all offering disjointed advice at intervals; but they made no attempt to approach the nest. If both the birds flew away together and, in their absence, any stranger attempted to meddle with the house, they both came tearing back as fast as they could and drove him away. But if only one went away, the bird which was left (and I am afraid I must call it "she") accepted the assistance of any and all comers with impartial cordiality. Any vagrom bachelor rook could come with the merest apology for a stick in his mouth and be assured of a welcome and permission to help to tuck the stick into its place. Many times there would be, as it were, a queue of two or three birds with sticks in their mouths waiting their turn to step up and make their contribution to the joint work. Nor were these operations at all clandestine. The Lord and Master was walking about in the paddock 50yds. away, and must have seen every item in the programme, which left him quite un

A SPRING HOUSE-FLITTING.

The nest was finished on March 29th, and the hen bird sat until April 7th, attended, apparently, by two male birds of equal assiduity. Then the nest was described. The birds simply disappeared, and the elm

tree was as silent as in former years. Not until the young from the rookery were fully fledged and able to fly down to the paddock, or sit on the paddock wall to be fed by their parents, did, so it seemed, any rook take the smallest interest in the elm tree. Then, however, what may or may not have been the original pair, came back with two young ones and used the old nest as a sort of summer home. This was the sequence of events in the spring of 1904, and it does not appear to square with anything that we know of rook economy. It is generally accepted as a fact that a rookery will, by general vote, expel an offending pair and compel them to go and live somewhere else. But in this case the incidents seem to indicate the precise reverse of this. There was every evidence of spontaneous action on the part of the Adullamite pair, and their housekeeping preparations seemed to have the full and friendly approval of the rookery. Then, I believe, though this is hard to prove, it was the other birds that made them come back home and make a new nest and raise a new family in the common domain.

HISTORY REPEATING ITSELF.

And exactly the same things happened in 1905. There were the same January meetings in the tree. The greater part of February was spent in pulling to pieces the old nest of the year before. On March 7th began the



CONSTRUCTING CASE GROYNES.

same promiscuous co-operation in repairing the structure, which continued until the 19th, when the nest was finished. The birds began to sit (again there was an extra one) and deserted on the 29th. Later there was the same return with two fully-fledged youngsters. There is one possible explanation of the recurring desertion to be found in the proximity of certain carrion crows; but if they have raided the solitary nest each year, why have they not also despoiled the more convenient rookery? Personally, I believe the crows have had no hand in it. And this year I am curiously impatient to see how events develop. So far there have been the same spring meetings. It obtained that the storms had left very little of the old nest this year, but what there was has been faithfully pulled to pieces, and I am waiting for the beginning of March.

A BLACK SPARROW.

To turn to another subject, equally black. We are interested at the moment in a black sparrow, which is among the daily recipients of our hospitality. It has not yet summoned courage to join the tits and the robins and the thrushes on the bird-table, but it comes daily to scramble with its fellows for the crumbs scattered on the lawn. When I call it "black," it is somewhat blacker, let us say, than a hen blackbird; of a nearly uniform sooty colour, positively black on the back and shoulders, and of a grey so dark as to be more than blackish over all the rest, except that the primary quills show just a faint tawny tinge suggestive of the proper colouring. Is the ireak very rare? I have never heard of one, and good naturalists to whom I have appealed say it is unique in their experience. And daily I am trying to make up my mind whether to "secure" the bird, or whether to let it live, and see what, if any, consequences follow in next year's brood.

A BOOK OF THE WEEK.

HEN a man dies, it seems to happen more frequently in our time than of old that an immense change comes over his reputation. It would almost seem as if the people of our time poignantly realised the truth of the old proverb that a living dog is better than a dead lion, and, metaphorically speaking, James Russell Lowell was a very great lion up to a very recent period. It was said by one of his countrymen that no other American had seen the inside of so many English country houses. Indeed, he was asked out in every possible circle of society. When acting as American Ambassador here, it was a matter of course that he should be welcome in diplomatic circles; but the literary cliques also made much of him, so that he became a sort of pet of society. Yet when we come to read James Russell Lowell: His Life and Work, by Ferris Greenslet (Constable), we seem to feel that his fate has been something like that of poor Yorick. The voice that set the table in a roar, or at least called forth, in the refined modern circles, an appreciative smile, has grown dumb and silent. We know that the author of the "Biglow Papers" must have been a very clever man indeed. We cannot call to mind anybody else of his day who could have produced such trenchant satire. The following passage gives a very striking illustration of the manner in which many inimitable phrases, such as "They didn't know everything down in Judee," and others, caught on:

It is said, perhaps mythically, that the Honorable John P. Robinson of Lowell, the same who said he wouldn't "vote fer Guvener B.," fled abroad to escape from the sound of his own name in the street; only to hear a child in an adjoining room at Liverpool chant the obnoxious refrain, and to be stung by it again on a street in Malta. However that may be, there was scarcely an editorial writer on any of the more radical papers at the North who could do his column without quoting some tag like,

"An' you've gut to git up airly ef you want to take in God."

It is a good fifty years since the book first appeared, and still the phrases from it are continually cropping up in literature. Possibly some explanation of the dwindling of Lowell's reputation may be found in the study of his life. His very great faculties were spread over such a wide range of subjects that it was impossible that he should attain the highest distinction in any one branch. He was a poet, a journalist, a professor, a politician, and a diplomatist. Born in 1819, he lived until 1891, and the whole period was one of strenuous activity. He was fortunate in the circumstances of his birth. Though an American, he was born in the old house of Elmwood amid surroundings very graphically described by his biographer:

From the front windows one looked over the lane that led to the highway, across a stretch of pasture land, to the clustering elms and prim spires of the college town. On the right the smooth-sliding, circuitous Charles slipped through brown salt meadows to the sea. A mile back from its further shore the low curve of Corey's Hill gave a special touch of character to the view. Behind the house, a ten minutes' walk distant, lay the picturesquely-bayed Fresh Pond, and beyond that stretched the wooded hills of Belmont and Arlington, and the pine-margined pastures of Lexington.

His father is described by a contemporary as being "Dr. Primrose in the comparative degree." His mother bore the maiden name of Harriet Traill Spence, two names honoured still in the Orkney Islands, where her father and her maternal grandfather were born. Lowell, indeed, in his more amusing

moments, used to trace their descent from Scott's heroine, Minna Troil, and Sir Patrick Spens. Mr. Greenslet says:

M s. Lowell possessed much of the wild beauty of the people of those windy northern isles, and her mind showed an irresistible tendency toward their poetic occultism. This tendency became irretrievably fixed by a visit which she made to the Orkneys in company with her husband early in their married life. Thenceforward until 1842, when her tense brain became disordered, she was a faerie-seer, credited by some with second sight. Like so many mothers of English poets, she was much given to crooning old ballads in the twilight. Apart from this mystical strain in her nature, three points are, for our purpose, especially notable. Her family was Tory in its sympathy; it was Episcopalian, where the Lowells were orthodox Congregationalists, or Unitarians; and there was a certain dreamful languor in the blood that blent queerly with the characteristic Lowell effectiveness.

Of Lowell's childhood it is only essential to notice two things, one of which was his delight in the open air, and the other his assiduous love of reading. We get a glimpse of the former in lines that were put into the mouth of Hosea Biglow himself:

'nuff sed, June's bridesman, poet o' the year, Gladness on wings, the bobolink, is here; Half-hid in tip-top apple-blooms he swings, Or climbs aginst the breeze with quiverin' wings, Or, givin' way to't in a mock despair, Runs down, a brook o' laughter, thru the air.

Like most of the youths of his time, his early allegiance was given to Byron, and the earliest of his attempts at rhyme shows many proofs of that influence. It was about the year 1848 that he first began to give evidence of a genuine poetic gift of his own. The manner in which the "Biglow Papers" were received is shown by a passage from an introduction to them by Hughes:

But for real unmistakable genius—for that glorious fulness of power which knocks a man down at a blow for sheer admiration, and then makes him rush into the arms of the knocker-down, and swear eternal friendship with him for sheer delight—the "Biglow Papers" stand alone.

It was in September, 1856, at the age of thirty-seven, that he began his ministrations to the youth at Harvard College, and at first his duties there were a delight to him, though as time went on they began to pall. After all, it is a monotonous task to deal with what our biographer very properly calls "the ageless stream of boys" that pass through a superior school, and had it not been that he was engaged in hard study on his own account, the life would have been unbearable. But what his private life was we can gather from a letter written to Miss Norton in 1874:

I have been at work, and really hard at work, in making books that I had read and marked really useful by indexes of all peculiar words and locutions. I have finished in this way since I came home, Golding's "Ovid," Warner's "Albion's England," Laing's and the Thornton "Metrical Romances," the "Chevalier au Lion"; and yesterday in eight unbroken hours I did Barbour's "Brus." Then I have been reading many volumes of the Early English Text Society's series in the same thorough way A professor, you know, must be learned, if he cannot be anything else, and I have now reached the point where I feel sure enough of myself in Old French and Old English to make my corrections with the pen instead of a pencil as I go along.

Besides being a writer, he was undoubtedly one of the best conversationalists of his time. An account of him in his own library has been preserved for us by the vivid pen of Sir Leslie Stephen:

The great lights of literature were there too, of course, and would suggest occasional flashes of the playful or penetrative criticism which is so charming in his writings, and which was yet more charming as it came quick from the brain. And Mr. Howells has witnessed to the same thing: When he quoted anything from a book, he liked to get it and read the passage over, as if he tasted a kind of hoarded sweetness in the words.

As an editor also he was a pronounced success, though perhaps as an author he found his best mission in life. He gave a character to the *Atlantic Monthly* that it retains to this day. He also managed to get round him the most brilliant wits in America at the time. This was almost inevitable, because Lowell in himself was first and foremost a great wit. There are people who still remember an incident thus described by his biographer:

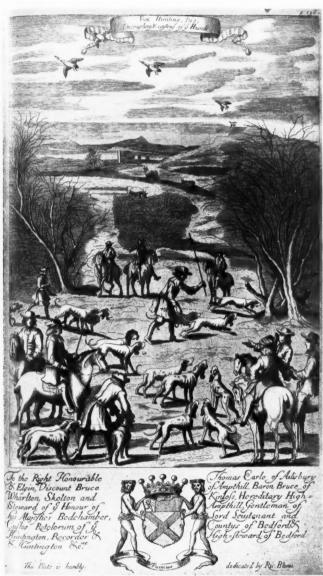
No public speaker was ever more resourceful and adroit in humorous literary allusion. For example, in a speech at the dinner of the Literary Fund on a nipping blustercus night in May, he began by reciting with prayerful irony that passage in Thomson's "Seasons," beginning:

"Come, gentle si ring, ethereal mildness, come."

All this is very pleasant and engaging. It is the record of a clever, learned, and witty man of the world, who, if he had concentrated his gifts on the attainment of any one single thing, was almost sure of the highest distinction; but, as we have said, his energy was diffused over too wide a field, with the result that, though he filled many posts, he was not super-eminent in any. This does not at all militate against fitness for a biography, and he is fortunate in being handed down to posterity by a sane and capable biographer, who unites with an almost enthusiastic admiration of his subject a judicial and reasonable method which commends what he says to his hearers.

FOX-HUNTING IN THE SEVENTEENTH CENTURY

N the eleventh chapter of the book of "The Gentleman's Recreations," the author begins in this wise his discourse on the hunting of the fox: "Amongst the Divertisements used by the Gentry of this Kingdom, Fox-hunting is of no small esteem. What has been Wrote on this Subject, and what has likewise gone by Tradition, was that which was practised when the Land was much more Woody." He proceeds to explain this as meaning that the old custom was to surround the coverts with a number of men and dogs, and mob the fox to death, really destroying him as a noxious vermin, and only incidentally finding sport in doing it. "But," he adds, "of late years (by Experience, the Mother of Invention) the Knowledge of this (as indeed of all other Chases) is arrived to far greater perfection, being now become a very healthful Recreation to such as delight therein." There follows a little of the natural history of the fox, with the old story of his dislodging the badger



UNCOUPLING AND CASTING OFF THE HOUNDS.

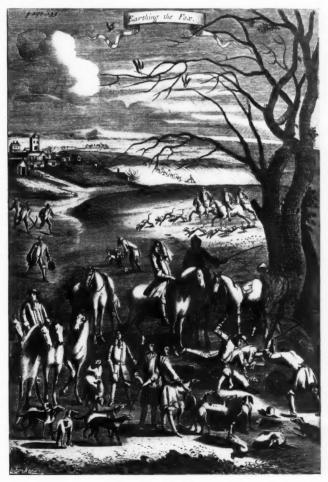
from his earth, and some other observations on the vexed subject of scent. His note on the kinds of hound best suited for the chase of the fox is interesting: "For the Hunting the Fox, the Hunds, or Beagles, generally made use of, are such as have good Mettle, are stout and well quarter'd. But they should differ according to the Country where they are hunted (as indeed in all other Chases;) for those proper for the open Champion-Countries, are the Northern-Hounds, which are fleet of Foot, and being thin-skinn'd, are not so proper for thick Coverts and bushy Enclosures as the Southern-Hounds, which are thick-skinn'd and slow-footed, and are not good for long Chases that the Champion-Countries afford. Also the Northern-Hound and Southern-Beagle make a good Strain for this Sport."

Our author has a long dissertation on hounds, very curious reading, in the beginning of the section on hunting generally. "Your large, tall, and big *Hounds*," he says, "call'd and known by the Name of the *Deep-Mouth'd* or *Southern-Hound*, are heavy



FOX-HUNTING.

and slow, and fit for Wood-lands and Hilly Countries. They are generally higher behind than before, with thick and short Legs, and



EARTHING THE FOX.

are generally great of Body and Head," and so on. "Opposite to the Deep-mouth'd or Southern-Hound, are the long and slender Hounds, called the Fleet or Northern-Hound, which are very swift, as not being of so heavy a Body, nor having such large Ears . . . and will run down the Game in an Hour, and sometimes in less; that is, a Hare; but the Fox will exercise them better and longer." them better and longer.

Evidently the "beagle," as he distinguishes it, is far bigger

harrier: "He is endued by Nature with an admirable Gift of Smelling, and is bold and courageous in the Pursuit of his Game, of which there are several Sorts, and all differ in their Services: Some are for the Hare, Fox, Wolf, Hart, Buck, Badger, Otter, Pole-cat, Coney, etc. Some for one thing, some for another." But he does not describe his shape and make particularly.

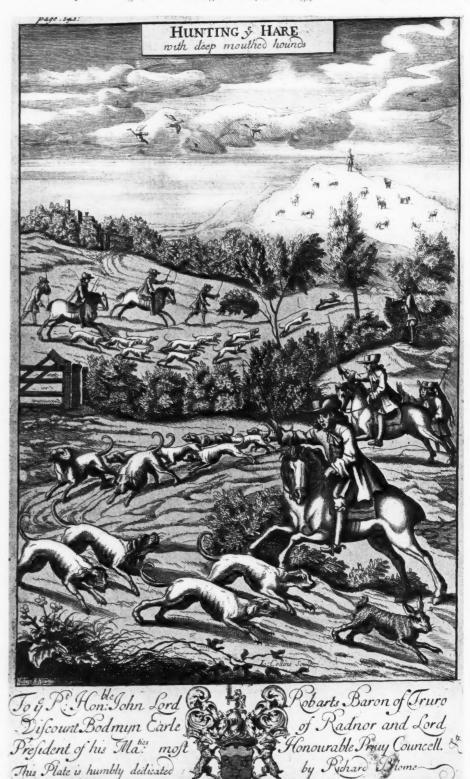
with some

such hounds we come back, towards the end of the seventeenth century, to the end of the seventeenth century, our fox; and this is how we set about hunting him: "Having found a Fox's Earth about Midnight, before ing, for preventing his Earthing, cause all his Holes to be stopt that you can find, except the main Hole or Eye, that is most beaten, which stop not until about Day-break, for fear of stopping him in; which done, let the Huntsman have all the Dogs in Couples, and having come to the Wood that you first design to try, first throw off your Sure-Finders or Staunch-Hounds, being such as will undertake no other Scent but that of the Fox (for Woods and Coverts are full of change), and when one or more of them opens, 'tis a sure Sign that he is upon the Scent, that is, where the Fox hath pass'd that Night, which is called a *Drag*, or Trail. If you find the rest of the *Hounds* that were cast off to improve upon it, and that the Cry mends, 'tis most probable they are right; and as the *Drag* mends, cast off more that you can confide in."

All this is most interesting, show-ing a mode of hunting the fox very analogous to that which was then, and is still, in use in stag-hunting, the marking of the fox's earth (then called "kennelling") being more or less analogous to what was then, and is still, called the "harbouring" of the stag-(in the "harbouring" of the stag, as then so called, the object was to find out the place in which the stag commonly lay—not, in the first instance, to find him in it)—the "staunch hounds," or "tufters," being laid on first, before the rest of the pack. Then the chase proceeds in manner not much unlike its fashion of to-day (though "fields" were somewhat smaller, if we may judge from the illustrations), except for this feature, which is worth noting in the author's words: "The Huntsman on Foot must cross (with what Hounds hath in Reserve) from Wood Wood, to be as much as possible in the Way, to throw them off when called upon, as an Encouragement to the rest (they being fresh), and at the same time must endeavour as much as he can to encourage the Finders, or Staunch-Hounds, that begin to run lag, that as Occasion may offer to have them ready for a dead Scent, or, as is thought fit, for the latter End of the Day.
"Many times they kill a Fox upon

"Many times they kill a Fox upon the Turf; but if he gets to an Earth and enters it, they cry Ho-up, as at the Death, supposing the Chasended, and blow a Horn to call in the Company." If the fox goes to earth he is to be dug out, terrier being used to keep him in a "butt" hole. Of the terriers, the author says. "As concerning Terriers, every on that is a Fox-hunter is of Opinion that he hath a good Breed; and some will say the Terrier is of a peculia Species of it self." He hazards no stion so difficult, but it is clear that he

Species of it self." He hazards me personal view on a question so difficult, but it is clear that he would be no little surprised if he went to a dog show to-day and saw not only that terriers were distinguished from othe "hounds or dogs," as he calls them, grouping them together an using the one word or the other indifferently, but also the vas number of different kinds of terriers that are distinguished by the modern breeder. He has a curious remark in the form of a cautior against letting the hounds break up the fox, as they are encouraged



HUNTING THE HARE.

than what we should call a beagle. He regards beagles apparently as a rather smaller variety of either of the above kinds of hounds, but adds, "there is also a very small sort of Beagle, not exceeding the bigness of a Lady's Lap Dog, which makes pretty diversion for the Coney, as also for the Hare, if the weather be dry.

To conclude these brief extracts on the three principal "Hounds," as we understand the word, he says of the his eir

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COURSING WITH GREYHOUNDS.

to do now: "For rewarding your *Dogs*, when the Fox is kill'd, hollow in all the Pack to bay him" (we may suppose "bay' here to be rather equivalent to what we should call "worry."



HUNTING THE OTTER.

seeing that the beast is dead), "but do not reward them therewith, as being not good for them."

From the hunting of the fox we pass on to the hunting of

the badger, and the author opens this head of his subject with a most remarkable piece of natural history. "There are two Sorts of Badgers," he says, "Dog-Badgers, as resembling a Dog in his Feet; and a Hog-Badger, as resembling a Hog in his cloven Hoofs." He goes on to tell us many details of the habits of the two kinds. It is most unfortunate that this singular variety with the diabolical feet should no longer exist. Of course, he has the old legend, derived no doubt from the rolling gait of the badger, that "their Legs are longer on their Right Side than on their Left; so that when they run they chuse the Side of a Hill, Bank, Furrow, or Cart-rout." He draws a very touching picture, which should appeal to Mr. Chamberlain and to all advocates of Old Age Pensions, of the latter days and filial piety of the badger: "They live to a great age, and when their Sight faileth by old Age, they keep to their Burrows, and receive their Food from the younger." He gives two modes of hunting them, which may, however, be used to supplement



HUNTING THE WILD BOAR.

each other-hunting the badger when he is out of his earth on a moonlight night, after setting sacks, tied with a slip-knot at the mouth, at the entrances of the earth, so that when the badger returns and dashes in he draws the mouth of the sack tight. The other plan is putting terriers into the earth and digging up to them, when they have the badger in a "butt" hole, just as is the more common way now.

Then we pass on to hare-hunting, which he treats of at great length, and evidently holds in high esteem: "This Chase affords Delight and Recreation to every Man." "Hares," he tells affords Delight and Recreation to every Man." "Hares," he tells us, "are very melancholy, and consequently very Fearful and Crafty"; and therefore we may suppose it is that he speaks of hare-hunting as "an Art full of Subtilty and Craft," but nevertheless he says elsewhere that "Whosoever hath hunted one and the same Hare twice, and doth not kill her the third time, deserves not the name of a Huntsman; for generally they use the same Slights, Doublings and Crossings, so that they may easily be prevented in any one, which defeats them of all the rest." He has a great deal to say, that is much to the point, about

the hunting of the hare, which is less worth dwelling on than

some of the priceless hints given in respect to other branches of sport, because they are so much more in harmony with our present fashion. The plates, singular as they are, show that the ancient mode did not vary very essentially from the modern. And from hunting he goes on to coursing with greyhounds; where again he keeps clear of some of the most strange counsels and views that are so delightful elsewhere.

The other creatures of the chase for whose hunting he gives directions, as well as new lights on their habits, are "the Coney or Rabbet," "the Otter," "the Beaver," "the Wild-Boar," "the Polecat, Fitchet, Martern and Wild-Cat," and "the Squirrel" (with a chapter all to its own small self), and has something to say in a final chapter about the taking of wolves in traps. boar, he says frankly, is no longer an innabitant of Great Britain. Of the beaver and the wolf he does not make any confident assertion, probably deeming them, like the animal he calls the "Rain-deer," rather difficult to find, but still in some small numbers. In his introductory chapter to the subject of hunting, he says expressly that the wild boar is the only animal not found with us of which he will treat, "being so noble a Chase in Germany"; and the legitimate inference is that all the rest were extant in England, or at least in this writer's imagination as British creatures, as late as 1682. His

outlook on the world must have been a very interesting one.

IN THE GARDEN.

PLANTS FOR ROOMS.

NLESS there are glass houses to nurse the plants in after they have been used for decorating the room, it is impossible to grow any except the hardiest and most vigorous. No plant is more enduring, even when exposed to draughts, than the Aspidistra, or Parlour Palm, as it is usually called. The long strap-shaped leaves are a clear green in the type, but in the variety variegata have stripes and bands of creamy white. It is not of very rapid growth, but even in its infancy stage there is something attractive in the bold handsome growth. The India-rubber plant, Aralia Sieboldi, Cyperus alternifolius, which requires much water, Norfolk Island Vine (Araucaria excelsa), of course in its small stage, and the Ferns Pteris tremula, P. cretica, and P. cretica albolineata live many years in a room if they are carefully watered, and, in the case of the smooth hard-leaved plants, carefully sponged occasionally to re-move accumulations of dust and dirt. The Aspidistra will develop into a mass of beautiful foliage, and in time will outgrow its place, necessitating division of the roots, which best accomplished in the early ing. Pot them in a soil of loam and leaf-mou d, about one-fourth of the

last mentioned to three-fourths of the former, and put two layers of crocks in the bottom, the larger first, then the finer pieces, with a little of the rougher parts of the soil over to keep the compost from silting down and obstructing the egress of water. When growth is in full vigour in spring, a little stimulant, such as Clay's Fertiliser, used strictly according to directions, will work wonders. The Cyperus requires to be almost placed in water, and is a very graceful reed-like plant of distinct appearance; so much so, that it is quite a relief to see a well-developed example of it. Care in watering and handling must be exercised to bring about success in the plants mentioned, and they must be kept away from cold draughts.

THE CARE OF YEW HEDGES.

A correspondent writes for information as to the care of a Yew hedge. A Correspondent writes for information as to the care of a Yew hedge. A Yew hedge should be clipped and attended to regularly at least once a year. After it is planted it will not require clipping until the second year, though any long shoots that stand out beyond the line of the hedge may be cut away at the time of planting. Always clip in May, and a second light trimming may be given in September if it is seen that the plants are growing strongly and making free growth. A Yew hedge up to a height of about 6ft, should be cut square at the sides and flat on the top, but above that height the sides should slope inwards, so that the top is only about half the width of the base. With high hedges, cut square, it has been found that the width of the base. With high hedges, cut square, it has been found that the top grows at the expense of the base, the latter in time becoming weak and thin. A narrow-topped hedge also does not favour the accumulation of snow. If a Yew hedge has been neglected for some years, it can be brought into shape again by a thorough overhauling and feeding. In the first place, it should be cut hard back in late spring just as growth begins, taking care,

however, not to cut back too hard, as the Yew does not break freely from old wood. It should also be reduced to half its former height; this is most important, as if not cut down the lower part of the hedge will be bare. At the same time a shallow trench should be dug along each side about 3ft. from the stems, and filled up with a mixture of good turfyloam and well-rotted manure in about equal parts. This is a good way o renewing a hedge which

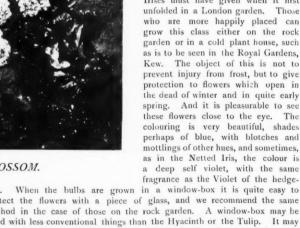
DESTROYING AMERICAN BLIGHT.

All Apple trees should be examined thoroughly at this season to discover if there are any traces of the terrible American blight, which, unless the utmost precautions are taken, will completely destroy the growth. It is almost impossible to get rid of it once it has established itself in an orchard, so that great watchfulness is necessary to prevent its lodgment on any of the branches. It spreads with great rapidity from branch to branch, and from tree to tree, and the merest suspicion of its presence must be met with drastic measures. Wet the part with methylated spirit by means of a small brush; but when the tree is seriously affected, first place cloths on the ground under the branches to catch the bits as they are scraped off, and burn them under the branches to catch the bits as they are scraped off, and burn them at once. As an additional precaution to prevent the disease spreading, damp the bark first with soap-suds; scrape away the bark, and scrub well with a stiff brush which has been dipped in a paraffin emulsion solution. Several washes are recommended, but the following powerful preparation is efficacious in bad cases: Dissolve Ilb. of caustic soda in Igal. of water, then add #lb. of carbonate of potash, stir until all is dissolved, and add ogal of water. Last of all add Iooz. of soft soap which has been dissolved in a little boiling water, mix

thoroughly, and the mixture is ready for use. It must not be allowed to touch the skin or clothes. When the attack is a mild one, quassia extract and Tobacco water mixed with soft soap is sufficient. It sometimes happens that the roots are attacked, and in this case expose them and dress with one of the insecticides. American blight is easily detected by the woolly substance covering the bodies of the

DWARF IRISES IN WINDOW-BOXES

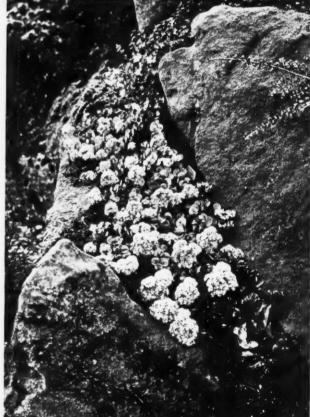
Some years ago we recommended the town gardener, or where the garden was much restricted, to grow the dwarf Irises, such as I. Vartani, I. reticulata (the Netted Iris), I. bakeriana, I. histrioides, I. Histrio, and the little yellow
I. Danfordiæ, in the window-box, and a correspondent writes to say that great success has been achieved at Battersea by growing these exquisite flowers in this way. I. Vartani has just opened this way. I. Vartani has just open its pale blue petals, and we can well Irises must have given when it first unfolded in a London garden. who are more happily placed can grow this class either on the rock garden or in a cold plant house, such as is to be seen in the Royal Gardens, Kew. The object of this is not to prevent injury from frost, but to give protection to flowers which open in the dead of winter and in quite early spring. And it is pleasurable to see these flowers close to the eye. The colouring is very beautiful, shades perhaps of blue, with blotches and mottlings of other hues, and sometimes,



row. When the builds are grown in a window-box it is quite easy to protect the flowers with a piece of glass, and we recommend the same method in the case of those on the rock garden. A window-box may be filled with less conventional things than the Hyacinth or the Tulip. It may be made quite an interesting little garden in itself, and some of the rarer Daffodils may be planted, such as triandrus, minor, minimus, and the Hoop-petticoat Narcissi, or Basket Daffodils. The window-box should be well drained, and the soil consist of a sweet loam.

USE OF THE ENGLISH PARKS.

Mr. Jordan, superintendent of Hyde Park, read a thoughtful paper recently upon "British and Foreign Parks—A Comparison," and in the course of his remarks alluded to the difference in the public use of the open spaces here and abroad. "In the public use of the parks at home and abroad there is a striking contrast. Here a very large portion of a park is used for games, is a striking contrast. Here a very large portion of a park is used for games, in the way of football, cricket, hockey, etc. Our youngsters may romp and play to their hearts' content. They may roll on the grass and do what they please within reasonable limits. They may sail their little boats on the waters and bathe at proper hours. The London County Council has done excellent service in providing grounds for games and facilities for other forms of recreation. As an opposite I may mention that in the Tiergarten, Berlin, no one would dream of walking on the grass in any part of that park. None but babies are allowed a little fun. The quiet retreats there are sand-pits for the young children, who are brought there in charge of a nurse or attendant; they revel in digging and moulding the sand, but woe to the child who in error lifts one foot over the guard railing—punishment is



A RILL OF BLOSSOM.

$OL\mathcal{D}$ SUSSEXIRONWORK.

PATHETIC interest attaches to the expiring efforts of a doomed industry. For centuries the iron furnaces of the Weald had set the sky aglow over the fairest parts of Kent and Sussex, until even the impenetrable forest of Anderida was completely devoured, and a "Black occupied its site with scores of helve and tilt hammers, splitting and rolling mills, forges and foundries. These had for centuries supplied the kingdom with most of its ironwork. The centuries supplied the kingdom with most of its fromwork. The earliest cannon used by Edward III., the guns that went down with the great Harry Grace de Dieu, and the railings which yet stand around St. Paul's, were products of the Weald. The monopolies and privileges of its manufactures were prizes for which the Court favourites intrigued and struggled, and on which the fortunes of many of our present noble families were built, as well as being the subjects of petitions and restrictive ordinances from feudal days to the close of the seventeenth century. Then the dearth of wood for fuel began to be seriously felt, furnaces had to be shut down, and the charcoal-iron industry of the Weald fell rapidly away in face of the competition of the rising coal-iron industry of the Midlands. The ironworkers of the Weald, deprived of employment, were driven either to emigrate or to find a new calling at home. Numbers of them very naturally fell to blacksmithing as a means of living, and set about producing such things as were most easily made in the smithy, the neighbouring gentry, farmers, and cottagers providing which the Court favourites intrigued and struggled, and on smithy, the neighbouring gentry, farmers, and cottagers providing an ever-extending market.

Their productions were of the simplest and most unsophisti-Their productions were of the simplest and most unsophisticated forms, evolved by themselves, the chief being holders for lights, trivets, ratchets, toasting racks, and tobacco tongs, three groups of which are illustrated. Of these the staple article was undoubtedly the light holder. To-day, when arc lamps, glow lamps, incandescent gas, and acetylene compete with each other, the days of rushlights and dips seem very far off indeed. Yet fifty years ago the farthing rushlight and the tallow dip were not only the illuminants of every cottage home, but in mansions even, though the saloons were effulgent with wax candles and Argand lamps, the nurseries and servants' quarters were as Argand lamps, the nurseries and servants' quarters were as dimly lighted as the humblest abode.

The holders for the prevailing lights were called respectively the rushstick and the candlestick, and the forms invented for these by the blacksmiths of the Weald in the late seventeenth and the eighteenth centuries were of the most primitive, consisting of a round stem of iron sharpened at one end, and fixed into a rudely-turned block of wood for stand, and terminating above in a pair of pincers to hold the rushlight, or an elongated cup for the dip. The movable jaw of the pincers for holding the rushlight finished in an outward and downward curving handle, ending in a knob, or in a cup to receive a dip when occasion required. Sometimes the wooden feet were shaped, and in other cases the smith furnished a tripod base. Examples of each type are illustrated, together with two hanging candle branches, ending in sharp hooks to catch in a beam. In the same group is a spiral coil fixed into a wooden base, taken from a German model, in which the candle can be raised by moving the pegs as it burns down. On the right is a wooden stand with rushlight holder, and in the centre a primitive flat candlestick and a turling pin, with a pair of the small tobacco tongs which constituted another staple production of the decadent period of the Wealden ironworks.

The second illustration presents other types of these tongs, of a round stem of iron sharpened at one end, and fixed into

The second illustration presents other types of these tongs, The second illustration presents other types of these tongs, used by smokers to pick up embers in the days when matches were not. The two interesting objects with saw-like iron ratchets are, respectively, a holder for two rushlights and one for a candle. These were suspended in the chimney corner, the height of the lights being adjusted to the necessities of the culinary matters in progress. Other objects are a primitive pendant chandelier for a rushlight or a dip, as necessity required, adjustable as to height, and a couple of toasting racks. The third group illustrates three of the longer light holders to stand on the ground, set in wood blocks. On the left is another of the ground, set in wood blocks. On the left is another of the combinations of rush and candle stick with a wooden ratchet attached, and in the centre the same combination adjusted as to height by a C spring on the centre rod. To the right is an attempt at a decorative rush holder, likewise manipulated by a spring on the centre rod. In the foreground are three of the more carefully-finished trivets, dated, and with the initials of the persons for whom they were made. The dates 1692 and 1765 are visible, the undated example being among the latest articles produced.

The industry lingered until the first decades of the nine-teenth century, when the introduction of composite candles, colza oil, and, finally, gas and petroleum, by banishing the use of their great staple, the light holders, ended the iron industry of the Weald for ever.



RUSH STICK, DIP HOLDERS, TOBACCO TONGS, AND TURLING PIN.



TOASTING RACKS, PENDANT RUSH AND CANDLE HOLDERS AND TONGS.

How vast and extended was the product of even its last flicker is seen in the very large number of objects recovered. The chief and most varied collection has been appropriately formed by Lady Dorothy Nevill, who belongs to a family who were once great Sussex ironmasters. Residing in the heart of lovely scenery, the former site of furnaces and rolling mills, she availed herself of her unique opportunities for obtaining specimens from the surrounding cottages before the ubiquitous London dealer had swept them bare. This collection is interesting as affording proof, if proof were needed, that the ironworkers of the Weald were, as a class, rude and uncultivated, and as destitute of artistic perceptions as any of the present-day workers in the iron mills of the Midlands. The trade of the Weald was wholesale, for rolled iron bars and for castings, and the workers were in no sense craftsmen. When the wholesale trade failed they hammered out their simple wares for a living, and were content to reproduce the same forms for generations, with rarely any attempt to invest them with interest or beauty.

J. STARKIE GARDNER.

THE SALMON OF THE SEVERN ESTUARY.

HE subject of the migration of salmon is so important, and so interesting, that no apology is needed in returning to it. Last year Mr. Hutchinson put forward a theory that the migratory instinct in the salmon was a survival of the time when England was united to the Continent, and the fish remained constant to the channels of our early rivers as they still exist in the bed of the sea. This is only another way of stating the proposition that salmon bred in a river always return to it. This view, which was long held by most naturalists, is still the official one, and upon it all our

salmon legislation is based. If it is wrong, the whole substratum of our law as to fishery preservation needs alteration. At one time I believed in it firmly, but the facts that I have collected for some years make me doubt it; and not merely doubt it, but induce the consideration whether it is not working real injury to the salmon fisheries, if not of all rivers, certainly of those which, like the Severn, possess a common estuary. The official idea is that each river should look after itself, breed its own fish, catch such number as it thinks well, and manage its own affairs without any reference to its neighbours. One district has no interest in the affairs of another district; it would be deemed impertinence if one Board opposed the bye-laws of a neighbouring Board. But is the division into districts a plan that works well for the general good of the salmon fisheries? I am inclined to think it is not, and my opinion is based on the following facts.

For the last three years, 1903, 1904, and 1905, the ascertained catch of salmon on the Severn has been about the same—1903, 25,000; 1904, 25,000; 1905, 22,500. These fish can be divided into three classes—salmon on their first return from the sea (grilse), locally called "botchers"; salmon on their next return from the sea, locally called "gillings"; and salmon on their third and subsequent return, salmon. It is disputed by some persons whether it is possible to tell gillings from salmon. I believe it is possible, but will not stay to argue the point now. Put in another way, there are: Grilse, fish over 15lb, and under 20lb.; gillings, fish over 20lb.; salmon. Very careful lists have been kept of the fish, and the results are instructive. Of the 25,000 fish caught in 1903, no less than a quarter, 24.77 per cent., were salmon; gillings were 55.34, and grilse 19.89. Roughly, it might be said that one half the take were salmon in the best stage, and the other half were made up of aged fish and immature fish in nearly equal parts, the aged fish being the larger part. It would be naturally expected that this would be reversed that the young fish would be the larger part, the middle agenext, and the aged salmon the least. If the fish bred in the

river all returned to it such would be the case, for it will not be disputed that the number of samlets is greater than that of the grilse, the number of grilse than that of the salmon, and the number of aged salmon fewest of all. If this order is reversed, as it is on the Severn, it points to the fact that all the fish the Severn breeds do not return to it, and that therefore the Severn breeds fish for other rivers, or, in other words, the official view that each river has to rely on itself for its supply of the severn out by the experience of the Severn. The salmon is not borne out by the experience of the Severn. The figures for 1904 confirm this view. Of the total catch, the number of grilse fell to the extraordinary figure of 5.91 per cent., the gillings rose to 61.05 per cent., and the salmon to 33.04 per cent.; that is to say, one-third of the catch were aged fish, and nearly two-thirds mature fish. On reading these figures it seemed as fthe river was fished out, and that in a very short time the salmon would become extinct as a Severn fish. No young fish, nothing but mature and aged, seems hopeless; a worse state of things it is hardly possible to imagine. If the official view is correct, the Severn is a doomed river. It was therefore a matter of some enxiety to see what the 1905 figures would be. They are still more startling than those of 1904. The grilse are practically the same; the mature fish show a decrease, but are still more than salf the take—5:66 per cent; while the salmon the grad fish have increased 6 per cent., from 33 o4 to 39 14, thus practically repeating the lesson of 1904. Three years' figures are not nough to go upon, or on which to base any detailed conclusion, but they do point very strongly to this, that all the salmon do not return to the river as grilse, but return either as mature or aged fish.

The figures in another way are of interest. The aged fish (salmon) for the three years were 6,168, 8,197, and 8,567. If it is remembered that the total take of the first two years was the same (25,000), an increase of 2,000 aged fish is very remarkable, and what is more remarkable is that

the very large fish, those over 35lb., do not increase in the same way. Only seven out of 6,168 caught in 1903 were over 35lb., the same number of the 8,197 in 1904, but fifteen of the 8,567 in 1905. Here again more information is wanted; but it is a fact which here to be explained. which has to be explained. What are the special circumstances of the Severn which are causing the number of fish from 18lb. to 30lb. to be so largely on the increase? It must be remembered that the increase for 1905 is especially striking, as the total take has fallen by 2,500 fish, but the number of aged fish caught has increased by 370. The mature fish, the gillings, also give some curious results. Of the 25,000 fish in 1903, 13,863 were gillings; but in 1904, out of the same number, 15,072 were gillings-an increase 1,209. It is true that this year, on 2,500 less fish, there is a decrease of 2,413 in gillings, which almost accounts for the whole falling off; but, in comparison with 1903, when there were also 2,500 more fish than in 1905, there are 1,204 less gillings than in that year that is, about half the decrease on 1904. Those who believe in the return of the fish to the river in which they were bred will take the guilse figures as proving their

The figures are very remarkable. Out of the 25,000 hishin 1903, 4,969 were grilse, wille out of the same number in 1904, only 1,731 were grilse—a falling off of no less than 3,238; but in 1905, out of 22,500 fish, only 1,274 were gillse—a falling off of 457 grilse as against 1904, and 3,595 from 1903. It will doubtless be said that

the 4,969 grilse of 1003 show

it was for the Severn a good grilse year, and hence the rise in gillings in 1904 and the rise of salmon in 1905, and the lalling off of grilse in 1904, account for the falling off of gillings in 1905. This view is a fair argument to use in support of the theory of the fish returning to the stream where bred. It will be said 1902 was a good spawning season, 1904 and 1905 were bad, and that explains it all. It is certainly a point that has to be considered, but it does not give a full explanation. In the first place, 1904 was not a bad spawning season, nor was 1903. It would, therefore, seem that some other reason must be looked for. It should also be noticed that the decrease of grilse has been going on for some years past, and that the bulk of the fish caught have been gillings. This is shown by the average weight of the fish. In old days a large take always meant a reduction in the average weight, as the large take was produced by the large number of grilse. Now the average weight is hardly affected by the numbers of fish, which, both in good and bad seasons, remain nearly the same.

The fact which the Severn evidence seems to go a long way towards proving is that the salmon bred in the Severn do not return to it as grilse, but, if they are Severn-bred at all, only return as mature or aged salmon. It is true a certain number return as grilse, but this is a decreasing number; the stock of salmon in the Severn during the fishing season is of mature fish. That in the early days of the Board this was not so the records of the Board show. Whatever may have been the cause, it is still in operation, and becomes stronger and stronger every year.

The two questions that press most strongly for solution, and which would, if they could be answered, give us very important knowledge on the life history of the salmon, are: First—What has become of the Severn grilse? Secondly—What has caused them to leave the river?

J. W. WILLIS-BUND.



OLD SUSSEX IRONWORK: TRIVETS AND STANDARD HOLDERS.



PON the site of Treasurer's House, in the venerable city of York, there has stood a dwelling, or a building wherein men have conducted weighty affairs, from a time "to which the memory of man runneth not to the contrary." The great Roman road passed the very door, the soldiers of Cæsar have often marched by, and there are those who think the famous Sixth Legion had their barracks on the spot, foundations of walls and columns having been discovered 12ft. below the level, between the Aldwark and the Minster, where the military buildings are believed to have stood. We may trace the history of this house of the Treasurer of York back to the days of the Conqueror and of Thomas of Bayeux, the Norman Archbishop, though some building that stood there had witnessed a whole world of history long before. What notable men have lived and worked at this place in the pre-Norman days—Paulinus, baptising Edwin of Northumbria and founding the Minster itself, Archbishop Egbert, who created at York the greatest centre of learning in England, or even in Europe, Alcuin, the magister scholarum and teacher and friend of Charlemagne. Then we can picture the coming of the Northmen, the ravages of their times,

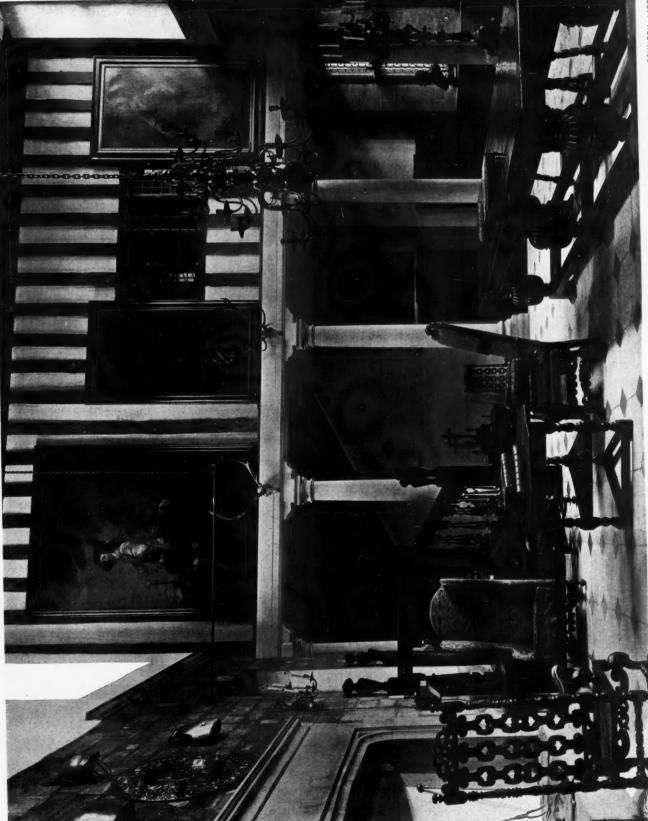
and the settlement of the Danes, who pushed their way up the Humber and the Ouse. The situation of Treasurer's House is unique indeed, and its old Jacobean frontage rises in the angle of the city walls, under the shadow of the great Minster which it views in admirable perspective from the north-east, surveying the magnificent range of the walls, buttresses, and windows of the choir, and having, perhaps best of all, the fair prospect of that wonderful chapter-house—ut rosa flos florum sic domus ista domorum—which is the delight and admiration of all lovers of English architecture.

English architecture.

It is a great and gratifying thing to find a truly domestic house standing in such a place. We might, perhaps, search England vainly through to find a parallel for this magnificent grouping of splendid architecture. The surroundings of mediæval buildings—including St. William's College, probably the most interesting Edwardian ecclesiastical lodging in the North—constitute a truly exceptional setting for the house, which contrasts well with the great fabric under whose shadow it stands. We cannot forget that here has passed much of the strenuous history of former times, nor that many great kings, princes, and prelates who have made history have received



DOORWAY IN DRAWING-ROOM OPENING ON TO THE RESTORATION CHAMBER.





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A GEORGIAN STAIRCASE.

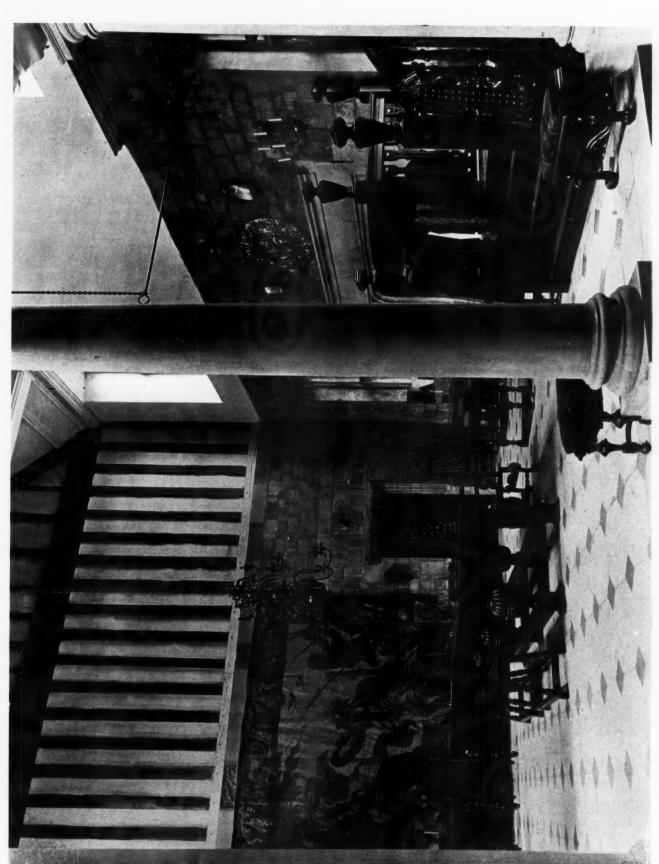
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THE GREEN PARLOUR.

"COUNTRY LIFE."



THE HALL FROM THE EAST.

Convriont

hospitality and shelter during 800 years at this very place. The oak timber out of which the beams of the house were hewn must have been growing even a thousand years ago in the great forest of Galtres, which up to the seventeenth century extended even to the walls of York.

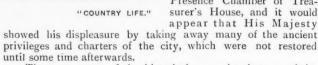
We said that the history of Treasurer's House went back to Archbishop Thomas of Bayeux. It was he who repaired the damage that had been inflicted upon the Minster, erecting new transepts and nave, with the aisles to the west of the small pre-Norman stone church, which he reroofed and utilised as the choir, thus making good the consequences of the neglect from which the sacred edifice had long suffered. He appointed a Chancellor, Treasurer, and Prebendaries, building

of the Treasurer included the care of the Treasury, the charge of the fabric of the Minster, and the proper control of all persons therein, save that his authority did not extend to the charge of the choir, which was within the province of the Dean and Chapter. The Treasurer supplied lights to the altars, and in his care were the altar vessels and the valuable and costly vestments which belonged to the church.

The office came to an end in the reign of Henry VIII., the last Treasurer being William Clyffe, who in 1538 resigned his dignities and some of his possessions to the King for a reason which seemed to be unanswerable—that the church, "having been plundered of all its treasure, had no further need of a treasurer"—abrepto omni thesauro, desiit thesauraii munus. The

, desiit thesauran munus. The possessions were granted to the Protector Somerset, but he sold them to Archbishop Holgate for 200 marks, and Treasurer's House went with them.
On the accession of Queen Mary, Holgate was deprived of his see, but under the terms of his will Treasurer's House was ordered to be again sold, and with part of the proceeds a hospital was founded at Hemsworth, his native place. Nicholas Heath, the new Archbishop, was the purchaser, but he being deprived in turn in 1558, the house was sold again to Thomas Young, Elizabeth's Archbishop, who devised it to his wife, Jane, for life, and then to his son George. This George Young appears to of James I., who knighted him at Whitehall in 1603, and it is recorded that the King and Lord Sheffield, President of the Council of the North, were entertained by him at Trea-surer's House, and that there eight Yorkshire knights were made.
Treasurer's House had by

this time lost all relation to the Minster, for whose service it had been raised. It was sold by Thomas Young to Sir William Belt, Recorder of York, and in Cromwell's time it passed to Lord Fairfax of Denton, and subsequently to Mr. Aislaby of Ripon, who is said to have been killed in a duel with rapiers by Sir Jonathan Jennings for having shut the gates of Treasurer's House upon Miss Mallory, daughter of Sir John Mallory of Studley, sister of his second wife. Mr. Aislaby and his wife Minster. His son, John Aislaby, entertained at his house James, Duke of York, who came with the Duchess, and we read that the Lord Mayor and Corporation were deemed by the King not to have shown sufficient respect these royal personages in waiting upon them in the Presence Chamber of Trea-



These are some of the historical memories that crowd the These are some of the historical memories that crowd the old chambers of this interesting dwelling-place. As will be seen by the pictures, it is of many dates, but its frontage may be assigned with certainty to early Stuart times, while its later adornments were introduced by many subsequent possessors. After 1698 the house was in the possession of one Mr. Squire, who redecorated much of it. It was subsequently divided, and passed through several hands. Viscountess Preston lived here in 1721, and at various times it was either owned or occupied by Lord Widdrington, Lord Winchilsea, the Morritts of Rokeby,



IN THE DINING PARLOUR

residences for them, so that Treasurer's House, as such, was then first brought into existence. One Radulphus was appointed the first Treasurer in the year 1100, and took up his residence in the house which had been raised, though excavation seems to have proved that it was erected on the site of a still older structure. This dwelling may have been burnt down in the great fire of 1137, which wrought such vast destruction at York, and it was probably rebuilt by John le Romain in the reign of Edward I., to which Treasurer is attributed the erection of the house on its present scale. We cannot recite here the long history of the Treasurers of York, but it is to be noted that among them was that William the miracle-worker, who is the patron saint of the adjoining St. William's College. The duties

"COUNTRY LIFE."



THE SOUTH FRONT, FACING YORK MINSTER.

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and other families, and Dr. Simpson, a well-known physician of York, occupied a portion of the house for many years. The north-east portion appears to have been permanently separated, and was owned by the first Lord Middleton, who sold it to Mr. Gray, the great-grandfather of Mr. Edwin Gray, the present owner of Gray's Court.

The city of York must deem it a fortunate thing that a house

The city of York must deem it a fortunate thing that a house so intimately connected with its history has fallen into the hands of those who value it. Future generations may be led thereby to realise that, despite the modern improvements which are daily going on in the ancient city, they have a precious heritage to treasure and preserve. As citizens they possess in their ancient buildings priceless remains, and they should be encouraged not lightly to destroy anything, remembering that, in order to gratify some sudden and fancied idea of progress, we have no right to injure or remove the wonderful and irreplaceable work which has been fashioned with such infinite pains and loving care by dead Englishmen, whose names have been prominent in history, and some of whose deeds are embodied in legend and romance.

recently been uncovered. The stone carving of the frieze of the Banqueting Hall is Jacobean, and the hall had traces of panelling. It would appear that Sir George Young altered the gables and added the classical features of the front, and old illustrations show that at one time all the gables were pointed, like one which is now at the back of the house. The basement has two early doorways, and a fourteenth century head of Queen Philippa, now in the hall, was found there in the excavations. Owing to the house having been divided from time to time, it was almost impossible to put it back exactly into its original condition, and it is a happy feature that the evidences of various periods rest upon it. The main object was to give an idea of the rooms and furniture of various periods, while it was also endeavoured to make the house inhabitable. The restoration took place in 1897, Mr. Temple Moore being the architect, and there is an added interest of the old structure in that it was occupied by King Edward and Queen Alexandra, then Prince and Princess of Wales, and Princess Victoria of Wales from June 18th to 21st, 1900.



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THE TAPESTRY DRESSING CHAMBER

"COUNTRY LIFE."

The house has been re-created and restored, as was inevitable, if it was to be made a dwelling-place suited to the needs and comforts of modern times. When Mr. Green first saw the house it was in three portions, much of it being built round, and he bought one of the portions as a residence, but found so many interesting structural features and remains of former times that he was encouraged to purchase the two remaining houses, and was thus enabled to bring back the house into something like its original condition. The restoration is not put forward as faultless, but nothing was done without authority from evidences left. It is right to leave all old work untouched, if possible; but this cannot always be done, and it was found that in some portions of the house alterations had been made, as in the insertion of sash windows, that seriously interfered with the stability of the old structure. It was, therefore, deemed best to replace the mullions and transoms, of which evidences were clearly traced. The Banqueting Hall is of the late fifteenth century, but another room, now removed, had been placed in the upper part of it, probably by Sir George Young about 1620. The fireplace and base mullioned windows on the east side apparently belonged to the time of Henry VIII., but they were bricked up, and have only

It is a pleasure to depict the Jacobean south front with its curvilinear gables, its beautiful windows, and its admirable doorway. What a prospect is it that the dwellers therein behold through those windows! The hall has necessarily undergone much reconstruction. At the south end the half timber work is the original repaired, but the windows are modern insertions. Of the north screen only the upper portion is original, and the stone classical columns are modern reproductions of broken and unusual columns which were found in situ. The fine arched fireplace is original, but part of the architraves have been restored, and the stone blocks represent the original level of the floor, while the brick herring-bone work at the back of the fireplace is original, and probably of the fifteenth century. The head of Queen Philippa, which has been referred to, will be seen over the doorway in the view of the Hall from the east. The main doorway is original, but the door itself is a reproduction, while the staircase is a copy of one in St. William's College. Much fine furniture is in the Hall, and the long Jacobean oak table was brought from Bradfield Hall, Slough, while other pieces of furniture belong to the times of Charles I., James II., and William and Mary, and there is much else in the fine apartment to interest the visitor.

The Green Parlour, which is a charming apartment, has a very notable fireplace and overmantel, which were removed from the Hall, where they had been placed in front of the more ancient arched fireplace. Much of the furniture here belongs to the age arched fireplace. Much of the furniture here belongs to the age of Anne, and is all very interesting and beautiful. We illustrate the beautiful fireplace and overmantel in the dining-room, and the fine wood and plaster work, which belong to the middle of the eighteenth century. Here also is good Chippendale and other furniture. The early Georgian staircase of the Inner Hall is very noticeable, as is the gilt Chippendale console table with the fine mirror over it, belonging to the time of William and Mary. The Tapestry Dressing-room, which is the subject of another of our illustrations, belongs to about the year 1600, and the oak panelling and tapestry which will be noticed, were found under the wall-paper. The fireplace is original Tudor. The Blue finely panelled in Queen Anne style, with a Drawing-room is offered Stuart ceiling; and the furniture and mirrors, which are of great excellence, are of the time of William III. and Queen Anne, some of them having been brought from Bradfield Hall. We may now pass through to the Restoration Room, which has much fine work, including Flemish tapestry and admirable furniture of Stuart and later times.

We shall not describe the beautiful old house much further, but there are interests in the Chapter House Street Room, the Tudor Dressing-room, the Green Georgian Bedroom, the White Bedroom (which was occupied by the King in June, 1900), and the other beautiful rooms, which it will always be remembered were occupied by the Queen and Princess Victoria. Thus Treasurer's House has in these later times become a treasurehouse of many excellent things, and, though a perfect example of restoration it may not be, it is a very notable work of artistic reconstruction; and, but for the keen interest which its owner has shown in it and the careful thought which has been bestowed upon its adornment, it might have remained an old structure, divided into separate residences, and progressing inevitably towards the decay and destruction which have been averted averted.

Long may the old frontage of historic Treasurer's House Eong may the old frontage of instoric Treasurer's Flouse impress the beholders who survey the exterior of that noble Minster and its many famous surroundings. It is an exemplar of past times, a memorial of great men and important happenings, and it is an example of what can be done to make a fine modern residence of an old and decoming where

A WIDOW INDEED.

F it wasn't for the rent, I could manage very well, my dear," said Mrs. Melmouth, eyeing her friend sharply through a cloud of steam; "but the rent! There! It do seem to keep a-hangin' over me all the week. Sundays is the only days I can draw my breath free, I do assure 'ee.'

"Along o' bein' so hard worked, I d' 'low," groaned Mrs.

Joyce, sympathetically.

Mrs. Melmouth slowly wrung out the small flannel petti-coat which she had just removed from the tub, and eyed her

"I be hard worked, jist about!" she returned. "Mondays and Toosdays washin' for Mrs. Hilton, what do never give more nor a shillin' a day and bring my own dinner; Wednesdays and Fridays, Mr. Meatyard—he do pay well enough—I have nothin' to say against him; Thursdays, Mrs. Marshall, up to Branston; Saturday, the Rectory—that's a very wearin' job, Mrs. Joyce, along o' my bein' forced to keep so still as a mouse, for fear o' disturbin' the Reverend when he be a-writin' of his sermon."

"I didn't think our parson ever wrote no noo sermons,"

interrupted Mrs. Joyce.

"Oh, he do, my dear; he do."
"There," persisted Mrs. Joyce; "he do say the same thing every Christmas reg'lar about all the mollon-colly things what 'ave happened since that time last year; and every Easter he do carry on about graves in churchyard, and how, as like as not, we'll all be in 'em afore another Easter Day do come round.

"Oh, well; very like he do say the same things, but he do say 'em in a different way. I know he do write 'em out afresh, for Mrs. Porter, there! she do come a-runnin' out if I do so much as knock brush again the floor. 'Hush!' she do say. It be very wearin', Mrs. Joyce."

"Ah-h-h!" groaned her crony again; "I d' 'low you must be glad when Sunday comes."

be glad when Sunday comes.

This remark brought back the conversation to its original starting-point. Mrs. Melmouth took both hands out of the tub,

that she might gesticulate the more impressively.

"Jist about!" she repeated, emphatically; "but mostly along of havin' paid the rent Saturday. I do breathe free along of havin' paid the rent Saturday. I do breathe free Sunday; but Monday I do start again a-worritin' an' a-worritin'. With a long family sich as mine be, Mrs. Joyce, there's no knowin' how you'll find yourself at the end o' the week. P'r'aps it's boots, and p'r'aps it's meddycine. Florence, there, she be allus a-havin' poomonia an' sich-like, what you do have to call a doctor in for. And there's times when childern 'ull eat twice so much as other times; and I haven't the heart to stint 'em, bless 'em! But there it is, Mrs. Joyce; there's the rent as has to be paid whatever happens; and the question as I do keep axin' o' mysel' from mornin' till night is, Where be I to find the money?" money?

At this juncture, a small boy detached himself from the group of children at the further end of the close room, and

approached his mother, wailing.
"What's the matter now?" queried the overwrought little woman, snatching him up in her arms. "What be makin' that noise for, Johnnie?"

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Johnnie entered upon a long and somewhat inarticulate explanation, interrupted by many sobs. He had dropped his bread-and-butter, it seemed, butter side downwards, and Herbert had trodden it under foot, and it was all black and "squozen

up"; and he was very hungry, but Florence said he mustn't

have any more.

"Dear, to be sure! A body 'ud think you could manage to eat your suppers wi'out throwin' good food on the floor!" exclaimed Mrs. Melmouth. "Where's the bread-and-butter, Florence?"

Florence:

Florence, a pale, sharp-featured child of twelve, produced a greasy, uninviting-looking slab, which did in truth bear out the afflicted owner's statement. Mrs. Melmouth's usually placid face puckered as she turned it over.

"Give me a knife!" she commanded, and forthwith fell to

"Nay, Johnnie, I haven't got no more for 'ee, love. You must just make it do. Look-see, Mother have got nearly all the black off now."

Johnnie burst into loud protests, and Herbert, drawing near with an interested face, observed that Dada never let them eat

dirty bread. Mrs. Melmouth hesitated for a moment.
"I know he didn't, Herbert," she returned. "But there, he bain't here now, you see. Us haven't got no Dada to work for us now—us must jist do the best we can. Now, Johnnie, give over cryin', there's a good lad, and Mother 'ull put a pinch o' sugar on the bread, look-see, and that 'ull make it taste all

Having duly pacified the child, she returned to her tub, sighing as she plunged her hands into the suds, and by-and-by dashing away a tear with one soapy knuckle. Mrs. Joyce, who had kept her eyes fixed on her in an unwinking stare, now observed cheerfully that if she were in Mrs. Melmouth's place

she wouldn't take on.
"Wouldn't 'ee?" said Mrs. Melmouth, her pretty, plump "Wouldn't 'ee?" said Mrs. Melmouth, her pretty, plump face still distorted by emotion; "if you was me I think ye would, though. You don't know what 'tis, Mrs. Joyce, you as has your 'usband and your good 'ome—you don't know what 'tis to keep on a-strugglin' and a-strugglin', and a-workin' your fingers to the bwone, and yet a-wakin' up every mornin' and never seemin' to get no forwarder."

"'Tis 'ard," agreed Mrs. Joyce, dispassionately. "I don't say it bain't 'ard, Mrs. Melmouth; all I says is frettin' won't make it no better."

"Oh! I bain't complainin'," said the widow, shaking out a

small shirt with jerky movements indicative of inward irritation.

Mrs. Joyce scratched her elbow thoughtfully, and surveyed her with her head on one side; she was a good-hearted woman,

and had no wish to appear unsympathetic.

"Such a good 'ome as you've a-lost so well as your good 'usband," she observed presently, in a tone of deep feeling. "There, Melmouth was gardener up at the Court ever since you

and him was married, wasn't he?" "Fourteen year," said the widow.

"A lovely little house you had there, too, hadn't ye?"

"E-es," said Mrs. Melmouth, with a gulp.

A vision of that little house rose before her: the rosecovered walls, the porch canopied with honeysuckle, the four
latticed windows which she was careful to keep so bright, looking out into the garden, the other four looking on to the wood—that wood which, as it now seemed to her, was always green and cool and full of singing birds. What a contrast to these two narrow rooms in the back street of the country town, which was now her only home, the two rooms where she lived so ill-at-ease, and which, nevertheless, it cost her so much to retain. Mrs. Joyce's voice again broke in upon her thoughts.

retain. Mrs. Joyce's voice again broke in upon her thoughts. "You be a young 'ooman yet, my dear—very like you'll take a second 'usband."

"What makes 'ee say that?" she asked, sharply.
"Oh, I'm only just a sayin'——"
"Six childern," went on the mother, rapidly; "six childern, Mrs. Joyce; 'tain't very likely as any man 'ud go and saddle hisself wi' they."

"Some midn't mind so very much," returned Mrs. Joyce, glancing sharply at her friend, and turning her head on one side. "There's some, I d' 'low, as wouldn't. Mr. Meatyard now—"
"Well?" enquired the widow, as she paused.

"He passed me by yesterday as I was standin' anigh Corn Exchange," resumed Mrs. Joyce. "An' he stops an' he turns round. 'Oh!' he says, 'you be a friend o' the Widow Melmouth's, bain't ye?' 'E-es,' I says. 'Oh!' says he, 'she be a nice plain'ooman.' That was what he said, Mrs. Melmouth, my dear!"

Mrs. Melmouth slowly drew one soapy hand through the

other without speaking.

"I thought I'd say a good word for 'ee," continued the other, "so I says: 'Tis wonderful, bain't it, sir, how well Mrs. Melmouth do get on, considerin' as poor Melmouth didn't make no population."

Mrs. Melmouth do get on, considerin' as poor Melmouth didn't make no pervision—"

"He couldn't," interrupted Mrs. Melmouth, almost fiercely.

"Well, my dear, I'm not sayin' as he could. I'm only telling 'ee what passed between me and Mr. Meatyard. 'Her wi' all them little childern,' says I. 'Tis wonderful, I'm sure.'

'How many childern have she got?' says Mr. Meatyard. So I told him six. 'Six!' says he—"

Mrs. Melmouth uttered a short laugh, and turned to her

Mrs. Melmouth uttered a short laugh, and turned to her

washing again.

"Ye haven't heard all, though," continued her friend, with a triumphant intonation. "He makes a step forward, and then he steps back, and he says, 'Well, Mrs. Joyce,' he says, 'they be very nice childern.'"

Mrs. Melmouth's face became very pink, and slowly dimpled into coniler.

"Did he say that?" she enquired.
"Them was his very words," returned Mrs. Joyce, impressively. "'Well, Mrs. Joyce,' he says, 'they be very nice childern."

Mrs. Melmouth opened her mouth as though to speak, but, changing her mind, closed it again, and went on with her work.

"Meatyard be a-doin' very well at the mill," insinuated

Mrs. Joyce.
"They say so," replied her friend.

"It must be terrible lonesome for the man all by hissel' in that girt big place," proceeded the visitor, artfully.

Mrs. Melmouth hazarded no opinion on this point.

"I dessay he'd be glad enough to have a handful o' playsome boys and maids a-cheerin' up all they empty rooms," continued

Mrs. Joyce.

Still the widow did not commit herself. She pushed back the man's cap which she wore on her still curly and plentiful fair hair, wrung out the last little garment, and then remarked

that she had finished for that night, and was just about tired.
"'Tis Johnnie's bedtime," she added; "come here, love, and I'll undress ye."

Mrs. Joyce took the hint.

"Well, I'll be gettin' home-along," she observed. "You'll soon be ready for your bed, too, I d' 'low, my dear. There, keep your heart up and make the best o' yourself; I'il be lookin' out to hear a bit of noos afore long."
"Good-night," said Mrs. Melmouth.

When the door closed behind her visitor, she called Florence to her, and desired her to get the little ones to bed while she went down town to pay her rent and make a few small purchases Having brushed her own hair and changed the cap before mentioned for a somewhat shabby sailor hat, she went to the drawer where she kept her money, and stood for some time laboriously calculating on her fingers. Three shillings some time laboriously calculating on her fingers. Three shillings for rent, one and nine for bacon, a shilling for that last bottle of "meddycine"; then the tea, sugar, soap, and candles. How little, how very little, of the carefully-scraped-together hoard would remain in that battered old purse when she returned! And Billy's feet were almost on the ground. The poor charwoman looked careworn enough as she descended the narrow, creaking stairs, and made her way into the street. So absorbed was she in solving that difficult problem of how to make a little money go a very long way, that she almost ran against a tall,

stout man in the market-place.
"I was jist a-comin' to see you, Mrs. Melmouth," said

Miller Meatyard.

"Was 'ee, sir?" returned the widow, curtseying, and glancing up shyly at his large, benevolent face, which, like everything else belonging to him, was powdered with flour. His hair and lashes were white with it the very wrinkles about his

mouth and eyes, and the creases in his double chin, were filled

up with it.

"E-es," cried the miller, jovially; "I was jist a-comin' to see you, my dear, jist this very minute."

"Was'ee?" said Mrs. Melmouth again.

"E-es," replied he, with a shout of laughter, as though his proposed visit was an excellent joke, "I d''low I was."

He paused and chuckled.

"To-morrow's Sunday, bain't it?"
"Sunday it be," assented the widow.
"Well, then," continued Miller Meatyard, still chuckling, "how would it be if you was to bring all they youngsters o' yours to dinner at the mill to-morrow? A day out 'ud do you good, Mrs. Melmouth, an' I could like very well to see the

good, Mrs. Melmouth, an' I could like very well to see the childern."

"Could 'ee, sir?" said Mrs. Melmouth, palpitating.

"Ah, I could," returned the miller, emphatically; "I could indeed. Well, you'll come?"

"Oh, e-es, sir, and thank ye kindly."

"That's right; I'll look out for 'ee. One sharp."

"Thank ye, sir, we'll be there."

Mr. Meatyard turned away, made a step or two after the manner described by Mrs. Joyce, and then wheeled again.

"We've a-cut the mead down by the river," he remarked.

"The little 'uns 'ul! like to play in the hay, I d' 'low."

"You're very good, I'm sure, Mr. Meatyard; but I don't think they'd look to do that, makin' such a mess, an' it bein' Sunday an' all."

"Never mind Sunday," cried the miller, with another shout of laughter. "We be goin' for to enj'y ourselves. 'The better the day, the better the deed."

Mr. Meatyard wagged his head with such a knowing air as he said this, and his blue eyes twinkled so archly beneath the

he said this, and his blue eyes twinkled so archly beneath their whitened brows, that Mrs. Melmouth became quite fluttered. She coloured to the brim of her sailor hat, and cast down her eyes in so much confusion that she was unaware of Mr. Meatyard's desire to shake hands at parting until he had possessed himself of the poor little sodden hand that had been scrubbing and washing all day, and pumped it solemnly up and down.

and down.

"That's agreed," said the miller. "'The better the day, the better the deed.' Oho! 'tis a good sayin', that."

He went away still convulsed with mirth, leaving the little widow much fluttered and perturbed. Mrs. Joyce's hint had confirmed a suspicion which had already taken shape in her own mind, and now, after the miller's words, it was impossible to doubt his intentions. "The better the day, the better the deed." He would probably speak on the morrow. Melmouth had not been in such a hurry. They had walked together for years and years as it now seemed to her—ever since she had left school years, as it now seemed to her—ever since she had left school and he had taken his first place. She remembered those walks, along the green lanes and across the downs and beside the river. Poor Melmouth!

irritably. "I'll thank ye to say if it's one or two bars o' soap you want."

"One, please, sir," said Mrs. Melmouth, lifting misty

eyes.

"Folks should make up their minds, and be quick about it," pursued he. "A packet o' candles, did you say? You couldn't give no more trouble, Mrs. Melmouth, if you was

orderin' a hundred-weight."

"Ha!" said Mrs. Melmouth to herself, as she turned away, clutching her packages. "I d' 'low you'd speak more civil if ye know'd what Mr. Meatyard has in his mind." And here she drew herself up proudly.

All that night, tired though she was, she lay tossing by the side of Florence, revolving that weighty question in her mind—would Miller Meatyard speak to-morrow, and, if so, what should she say? Never to know want again, always to have food for those little hungry mouths, boots for Billy, proper doctoring for Florence, as much bread-and-butter as Johnnie wanted—the temptation was great. But when she fell asleep at last in the summer dawn, she dreamed that she was a girl again roaming the lengt with Melmouth. the lanes with Melmouth.

At midday the little party duly set forth for Riverton Mill. Mrs. Melmouth and the children alike were dressed in their best, and presented a notable appearance. The widow had indeed done wonders; no one would have guessed that Florence's well-starched white frock was made out of an old print dress of her mother's, which had been boiled and bleached; Billy's boots had had soles manufactured for them of brown paper, and were so well blacked that one would scarce have noticed their gaping toes; and Johnite's clean collar atoned for the threadbare continued in the scarce of dition of his little coat. Mrs. Melmouth herself, in her decent black dress and plain hat, and with a flush of expectation in her face, looked young and pretty enough to justify the ecstatic chuckle with which the miller greeted her. "Well, and so here we be," he cried, boisterously, as he met her at the gate of his premises. "Here we be all so right as anythin'. Little chap's a bit tired wi' walkin' so lar, bain't he?"

"Well, he is but three years old," returned the mother,

apologetically.

"Ah," said Mr. Meatyard, reflectively; "three year! he be the youngest, bain't he?"

Mrs. Melmouth nodded.
"Three year," repeated the miller; "come, little man, upsyy!" He caught up the child in his stout arms, hoisted him to his shoulder, and carried him triumphantly into the house. Johnnie, recovering from his momentary consternation, made himself very much at home, and thumped the miller's proverbial

white hat in token of satisfaction.

What a dinner was that which was spread in the big, cool g-room. There was a noble piece of beef and two roast living-room. fowls, vegetables galore, and at a later stage a suet pudding and a fruit dumpling so bursting with its own goodness that it flowed all over the dish. These dainties were set upon the table by a stout old woman with a moody, not to say morose, expression of countenance, who listened to the children's delighted outery and Mrs. Melmouth's timid compliments with the like stony indiffer-The jovial countenance of the master of the feast clouded over for a moment when she departed after depositing the dumpling on the table.

"Her and me don't so very well agree," he remarked.

"There'll have to be a change here soon."

"Oh, indeed?" said Mrs. Melmouth, faintly.

"E-es," returned Meatyard, with a threatening roll of the shoulders, "a man mid be a lone man, and yet he midn't like to be put upon." Here he rapped the table with the handle of

be put upon." Here he rapped the table with the handle of his knife, and looked expectantly at the widow.
"Certainly not," agreed Mrs. Melmouth, diffidently.
"A man," pursued the miller, warming with the subject, "mid be a quiet sort of a man, and yet he midn't like advantage to be took of him; grumblin' and growlin' at a man's ways in's own house, an' folk turnin' tilty and cross-grained for nothin' at all." at all.

"That's too bad," commented Mrs. Melmouth.

"That's too bad," commented Mrs. Melmouth.

"It be too bad, Ma'am. Look-see! S'pose I say I'll have dinner at one o'clock, well and good. Somebody comes a-lookin' for I, or maybe I'm kep' by summat t'other side o' the farm."

"Well?" echoed Mrs. Melmouth, feebly.

"Be that any reason," shouted Mr. Meatyard, "for folks a-grumblin' along o' my not comin' 'ome till two o'clock? If the meat's 'ard, it be my look-out, bain't it? And if taters be done to a cinder, they'm my look-out too. 'Tis bad enough for I to be forced to eat 'em, wi'out folks a-grumblin' an' a-growlin'."

"Tis sure," agreed Mrs. Melmouth.

"I knew you'd say so, Ma'am," said the miller, becoming

"It sure," agreed Mrs. Melmouth.

"I knew you'd say so, Ma'am," said the miller, becoming bland and placable once more. "Well, the long and the short o' it is, me and Martha yonder has agreed for to part."

"Oh! an' have ye?" returned Mrs. Melmouth, nervously; and when—when mid ye be goin' for to part, sir?"

Mr. Meatyard laid down the knife, which he had been still brandishing, and turned towards her with a portentous expression. "It be a understood thing as Martha be to shift so soon as I do want her to. So soon as ever I do say to she, 'Martha, ye may pack yer traps an' go,' she'll do it. She'd have to go to-morrow if I was to ax her. There, the little chap be a-lookin' Ye'll oblige me by givin' him for some more puddin' I d' 'low.

a good plateful, Ma'am."

Mrs. Melmouth obeyed. She could eat little herself. It was strange to be sitting so grand and genteel in the room which she had so often scrubbed out, to be waited upon by the housekeeper under whose tyrannical rule she had frequently groaned, to be treated with such deference by the master of the house; above all, to think that if she chose comfort and plenty might be hers to the end of her days. She grew more and more might be hers to the end of her days. She grew more and more silent and thoughtful as the meal progressed; the miller, on the contrary, became more cheerful and amorous; indeed, by the time his pipe was produced, his attentions became so marked that, as Mrs. Melmouth subsequently related, she "scarce knew which way to look, along o' the childern."

"You'll light it for me, won't ye, my dear?" he said, coling her knowingly.

ogling her knowingly.

"If ye like," responded she.

"Mother used to light Dada's pipe," exclaimed Billy.

The blackened briar almost dropped from Mrs. Melmouth's

The blackened briar almost dropped from Mrs. Melmouth's hand, and she turned quite pale; but the miller was too much preoccupied to notice her emotion.

"Did she?" he cried, with a delighted laugh; "well, there's nothin' like bein' used to a thing, be there? Tell ye what, youngsters; supposin' you was all to run out and play in the hay a bit. Little bwoys and maids be terrible fond o' playin' in the hay, I'm told. I never had none o' my own, or I'd ha' know'd for certain; but I'm told they likes to go a-playin' in the hay. So cut away, all on ye. Mother an' me'll jine 'ee presently."

The children joyfully scampered off, and Mrs. Melmouth, having daily filled the pipe, handed it tremulously to its owner, and reseated herself on the extreme edge of her chair, feeling very nervous and ill at ease. The decisive moment had come; what should her answer be? The miller, however, seemed in no hurry to propound the momentous question. Having lighted his pipe, he leaned back in his elbow-chair, puffing luxuriously, and occasionally grinning affectionately at her through the smoke-

"Ah!" he said, at length; "I never had no childern, but I

had a missus once.

Mrs. Melmouth mincingly responded that she had heard Mr. Meatyard had been a widower for some time. "E-es," rejoined the miller; "ten year. I felt 'frayed-like

"C-es, rejoned the inner; "ten year. I left frayed-like to take a second."

"Oh!" said Mrs. Melmouth, as he paused.

"E-es," he resumed; "my first ventur wasn't what you would call lucky, Mrs. Melmouth."

"Oh, and wasn't it?" said the widow, without daring to relice her cause.

raise her eyes.

"My first ventur' wasn't lucky," he repeated, with emphasis;
"an' I couldn't make up my mind for to try again."

He puffed in silence for a moment or two, and then continued: "I thought I'd content myself wi' 'ousekeepers; but there, 'ousekeepers i' the long run be jist so bad as wives—jist every bit so—so owdarjous and opressonable. I've a had young I've a-had young der. When they every bit so—so owdacious and onreasonable. 'uns, and there was no keepin' of 'em in arder. When they didn't take up wi' some idle young chap, blowed if they didn't

want to take up wi' I."

"Well, I never!" exclaimed the scandalised Mrs. Melmouth.

"As for the wold 'uns," went on the miller, sucking reflec-

tively at his pipe; "well, there, you've seen Martha."

He paused, fanning away the smoke so as to contemplate Mrs. Melmouth's countenance more easily. To her intense annoyance, she felt a flush rising in her cheeks. After what seemed an interminable interval, the miller removed his pipe from his mouth and pointed at her with the stem.

"Now, I'll tell 'ee what," he said. "I've a-had my eye on

'ee for some time."
" Have 'ee, sir?" faltered the widow.

"E-es, there was times when I did think as I'd engage 'ee for to be my 'ousekeeper."

Mrs. Melmouth raised her head suddenly, her face

lighting up.

"But I've been a-turnin' the matter over in my mind," pursued the ardent lover, "an' I've come to the conclusion as I mid jist so well marry ye as not."

"Thank 'ee sir, I'm sure," Mrs. Melmouth was beginning, when he silenced her with a wave of his pipe.

"Some folks mid think the six childern was a drawback," he said, "but I don't. No, I could like very well to see 'em playin' about, an' they'd soon learn for to make theirselves useful, I d' 'low."

"Well, they'd do that," admitted the mother.

"And again," went on the miller, in an argumentative tone, "there's them as 'ud think it a bit foolish for a man like I to go a-takin' up wi' a poor 'ooman what hadn't so much as a pig to her name, an' what was used to get her livin' by goin' out

"An' that's true," assented Mrs. Melmouth.

"Well, 'tis true if ye like," returned Mr. Meatyard, dispassionately, "but I d' 'low I'm not like to repent, I d' 'low I bain't. You be a nice plain 'ooman, an' I'd not ax to find a better-tempered one nowhere. I've a-tried ye every way. Do you mind last week when I come walkin' up the steps what ye'd jist scrubbed, wi'out wipin' my muddy boots? I done that a-purpose," cried the miller, thumping the table with a great roar of laughter. "I done it a-purpose! Says I to myself, 'If the 'ooman' ull stand that, she'll stand anythin'.'"

"I didn't think you'd be so artful, Mr. Meatyard," murnered Mrs. Meatward, but hurching too but constrained by

"I'm artial enough," returned he, emphasising the statement by a deliberate wink. "That was the very day I did make up my mind. Thinks I, 'I'll ax her o' Sunday.' 'The better the day, the better the deed.' Ho! Ho! Well, shall us be called home this day week?"

Mrs. Melmouth sat quite still, pleating the skirt of her dress nervously. After waiting a moment or two, the miller leant forward in his chair. "Well," he cried, "what do ye say?"

The widow raised her eyes to his face. "If you please, she said, modestly but firmly, "I'd sooner be your 'ousekeeper."

"What!" cried Mr. Meatyard, utterly taken aback

"I'd sooner be your 'ousekeeper," repeated Mrs. Melmouth.
"If you'd be so good as your word, sir, an' let me an' the childern bide here, you'd find us do all in our power to give ye satisfaction. Billy is gettin' a big bwoy, and shapes very well at runnin' messages and doin' light jobs, and Florence could help me about the 'ouse, and I'd see as the little 'uns didn't get in your road, and I'd do for 'ee, and never want no help nor

nothin', and never, never grumble or say anythin' to vex ye. If ye'd give me a trial, sir, I d' 'low I could please ye."

The miller lighted his pipe again, and smoked for a moment or two in solemn silence; then leaning forward again he tapped her on the arm. "I d' 'low

"I d' 'low ye could," he said, "but why won't ye marry me, my dear?"

The widow hesitated, coloured, and went on pleating her skirt with a tremulous hand.

skirt with a tremulous hand.

"I've no wish for to change my state," she faltered at last.

Meatyard stared at her blankly, and, feeling the necessity of giving a fuller explanation, she raised her eyes to his face.

"Bain't there summat i' th' Bible about bein' 'widows indeed'?" she said. "I d''low I do want to be a 'widow indeed.'"

The miller slowly straightened himself, staring at her the while with his mouth screwed up, and his eyes round with perplexity. "Well, I'm dalled!" he exclaimed.

"I'd do my very best to make we comfortable" urged

perplexity. "Well, I'm dalled!" he exclaimed.

"I'd do my very best to make ye comfortable," urged Mrs. Melmouth. "I'd look after things proper, an' work hard, an' the childern'ud do all they could to help, an' see as they didn't give no trouble. An'—an' it 'ud be a'most the same as if we was married, Mr. Meatyard."

"Nay, my dear, it wouldn't be that," returned the rejected wooer, disconsolately; "but if your mind's set on bidin' a widow I'll not go agen ye. There! ye can come an' keep the 'ouse for me same as ye say, an' the sooner the better. Next week shall it be?"

"Oh! Mr. Meatyard. I don't know how to thank ye."

"Oh! Mr. Meatyard, I don't know how to thank ye

"Well, well, I must be content wi' that, I suppose,"
"Well, well, I must be content wi' that, I suppose,"
rejoined he. "I could ha' done wi' a little love from their
mother—but there! we'll say no more about that. It be all
settled, and I d' 'low we'll get on first-rate."

He check her hand less boisterously, perhaps, then an

He shook her hand—less boisterously, perhaps, than on greeting her, but just as warmly—and the little widow, overcome by his generosity, wept behind a corner of her shawl.

Great was the astonishment in the neighbourhood when it was discovered that the widow Melmouth had migrated with

all her little tribe to Riverton Mill, and that she was keeping house for her professed admirer without having the slightest intention of entering into the bonds of matrimony. Astonishment soon merged into condemnation. The heads of village gossips nodded portentously, and their tongues wagged furiously. Anything so barefaced, people said, and a woman what had always kept herself so respectable. Why, the man himself asked no better than to marry her—that was the amazing part of it; nothing but Mrs. Melmouth's innate depravity could account for her conduct.

This public scandal was finally brought to the notice of the rector, a gentle, kindly old man, a bookworm and a botanist, who liked better to administer soup than scoldings, and was more at home in examining the delicate wonders of a flower than in enquiring into the intricacies of the rustic conscience. However, this was such a flagrant case that he felt it his duty to remonstrate with Mrs. Melmouth, who had always been a favourite of his, and who, indeed, had previously never failed to give a good example in the parish. He was as much taken aback as the miller himself when Mrs. Melmouth modestly put forward her desire of remaining a widow indeed. He gazed at her for a moment over the rim of his spectacles.

"But, my dear woman," he said at last, "do you not realise

that you have taken a step which is—or, at least, has the appearance of being—extremely irregular? You are still young, and—ah!—are far from being unattractive, and this man is known to be deeply attached to you. Under the circumstances, and much as I respect your religious scruples——"

Here the widow interrupted him.

"But Places of the property o

"Please, sir," she said, bobbing her old-fashioned little curtsey, "it isn't so much along o' bein' religious. It's jist—jist," her voice faltered and two big tears leaped out upon her cheeks, "I can't but think as Melmouth wouldn't ha'

The villagers of Riverton were astonished on the following Sunday by a quite new sermon on the enormity of backbiting and slander, and the folly, not to say criminality, of judging from appearances.

PRUNING OF FRUIT TREES.

not to prune has albeen a debatable point to the ardent fruit-grower, and is still a there great difference of opinion as to the wisdom of cutting back the trees to promote a more abundant fruitfulness. Some contend that no pruning at all is the correct policy, others that certain varieties must be severely cut in to obtain a satisfactory crop; but the practice of pruning has so important a bearing upon the fruit industry that we hope growers of experience will express their views with the object of sound

We hear much of the fruit-growing and definite information. industry in this country, of the wasted orchards, picturesque to the artist's eye, but deplorable from the point of utility, and of the acres that could be converted into profit; but while men with a sad want of experience of the most elementary kind venture into the business, little headway will be made towards meeting the severe and increasing competition from colonial and foreign imports.

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It was with a view of bringing this subject prominently forward that we spent a few hours in the experimental fruit farm of the Duke of Bedford at Woburn, which Mr. Spencer Pickering, F.R.S., has ably superintended for many years past,



AN UNPRUNED

"COUNTRY LIFE."

recording his ex-perience in carefully-compiled reports. The effects of pruning the trees here have been closely studied since 1894, and most of the results have proved of considerable interest. It is important and useful to have trustworthy monstrations of all horticultural operations, as it is largely by such means that errors are discovered and im provements effected. In this direction, such establishments as the experimental fruit farm at Woburn can render substantial service to cultivators, as there practical work is conducted with scientific ac-

The experiments devoted to pruning have been chiefly curacy. concerned with apple trees, both dwarf and standard, but they have been also extended in two instances to mixed plantations of apples, pears, plums, gooselerries, and currants. The investigations, however, have been mainly confined to bush or pyramid apples of the three varieties, Bramley's Seedling, the delicious Cox's Orange Pippin, and Pott's Seedling. Trees three years of age, Orange Pippin, and Pott's Seedling. Trees three years of age, all on the same stock—a broad-leaved Paradise—were planted in the winter of 1894 in lines of eighteen trees, six of each variety, and every row formed the subject of a distinct experiment. Fifteen of these were allotted to pruning merely, ten to branch treatment, and five to the consideration of the root, including

two rows which received the ordinary treatment in garden

practice for comparison with the others.

The subjects dealt with have been treated as follows: (1) Cutting back the growths at the time of planting, and annual autumn pruning afterwards, which constitute the normal form of treatment. (2) Not cutting back the tree until the end of the year after planting, then giving annual pruning as in No. 1. (3) Cutting back the growths immediately after planting as in No. 1, but with no subsequent pruning of any kind. (4) Neither cutting back nor pruning the trees in any way from the time of planting, i.e., they were put in the ground just as received from the nursery. These four experiments were directed to an investigation of the relative effects of cutting back at the time a tree is planted and leaving that operation until the following year. It is on this question that so much difference of opinion exists amongst growers. Further, the behaviour of trees regularly pruned was contrasted with that of others pruned in one season only, and with some that were not pruned at all.

In other plots autumn pruning only was compared with that operation in addition to summer shortening, with summer pinching and no autumn pruning, and with late summer pruning, hard pruning also being studied in one experiment amongst the dwarf apples. The most satisfactory examples in this direction



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NATURAL GROWTH.

"C.L.

were afforded by three experiments in a mixed plantation in which hard pruning was contrasted with moderate (or normal) pruning, and with very slight cutting. There is also a difference of opinion as to the merits and demerits of root pruning. In the section devoted to experiments with this phase of general practice one row of trees may be seen which have been root pruned every year, another every second year, and a third every fourth year. Gardeners, and all fruit-growers, should take heed of the results. At Woburn one lot was root pruned only when it was deemed necessary to check undue luxuriance in the growth of the tree, and in a fifth lot the trees have been lifted every second year, preserving the roots as far as possible, no actual root cutting being performed.

year, preserving the roots as far as possible, no actual root cutting being performed.

It will be seen from these details that the investigations undertaken covered a very wide field, and to arrive at a satisfactory judgment it was necessary to carefully weigh several matters. The methods adopted for securing the desired evidence were the following: (1) The measurement of the growth made by the tree, the diameter of the stems, and the height and spread of the branches. (2) The measurement or weight of the leaves, together with the number of the leaves in some of the early stages. (3) The total weight of fruit produced, the number of fruits, and their average size. In addition, photographs were taken of the trees in various stages, thus fixing their general



RESULT OF ONLY SUMMER PRUNING.

appearance for after reference. In some cases where further evidence was desired and certain experiments were repeated the trees were also weighed at the time of planting and again at the conclusion of the period allowed, so thoroughly was the work carried out to arrive at the facts upon which conclusions were to be based.

The reports, issued under the names of the Duke of Bedford, K.G., and Mr. Spencer Pickering, F.R.S., furnish most elaborate details, with tables of percentage in the increase or



Copyright. SEVERELY PRUNED IN AUTUMN. "C.L."

decrease in wood, leaf growth, and fruit crops, but for general purposes a brief summary will suffice to indicate the effects of the various treatments as a guide to cultivators. First, with regard to cutting back apple trees at the time of planting or delaying this operation until the year after, the evidence is distinctly in favour of the former practice in both leaf and branch growth; but as it was not sufficiently marked to be conclusive at first, several other experiments were undertaken with the same varieties, also with dwarf pears, and standard apples and plums. The results afforded general confirmation of the other trials, namely, indicating that an advantage was perceptible in favour of cutting back the trees at the time of planting in preference to leaving it for a year. It has been very properly pointed out that not only does the amount of root injury received at the time of transplanting influence such after treatment, but that even the length of time the trees are out of the ground exerts a marked bearing upon their behaviour. It is therefore possible that the differences in growth observed at Woburn might be greatly reduced elsewhere. In the case of the fruit crop in the early years after planting the effects of deferring the cutting back for a season were most conspicuous, the loss of fruit being very great compared with normal trees.

Cutting back the trees once and then leaving them alone

resulted in rather bare branches; but a few specimens were of



EFFECT OF PRUNING ROOTS EVERY

fairly good shape, and would have needed very little attention to bring them into proper shape. Fruits have been produced far more abundantly on these trees than where continuous pruning was adopted, but they have been generally small or irregular (i.e., a few large and many small), and their market value has been less. In the rows where the trees have received no pruning the branches are long and straggling, the trees occupy much space, so much so as to crowd each other, and in stormy weather they are torn down, and the fruit damaged.

are torn down, and the fruit damaged.

Hard pruning has given a preponderance of unfavourable results, but it has been most clearly demonstrated in the plot where hard-pruned trees and bushes have been compared with those moderately and slightly pruned. The hard pruning has resulted in diminished crops of individually larger fruit, the medium pruning has given ordinary crops, while in the very slight pruning the increased weight was formed of such small fruits that their actual money value was very low. The summer shortening, pinching, or pruning yielded no results of importance; in fact, it does not appear that any substantial advantage in fact, it does not appear that any substantial advantage was gained by either of the practices. It should, however, be remembered that the difference between trained-on-wall trees and freely-grown bush or pyramid trees in the open is

very great, and the treatment must be proportionately varied.

The whole balance of evidence so far is entirely in favour of moderate pruning, and with regard to the evils of excess in either direction—no pruning or hard, continuous pruning—the demonstration at Woburn is complete.

The root-pruning experiments have in the same way

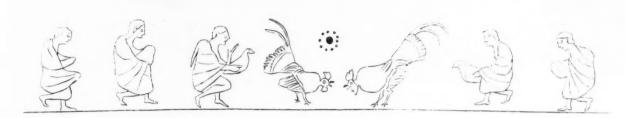
conclusively shown how speedily root injury influences the branch growth and tree development. The gradation in size from those root pruned every year to those that had been so treated only once has been remarkables. treated only once has been remarkable. As a means of checking undue growth nothing is more satisfactory; but, as with branch pruning, excess results in injury, or, if carried to greater extremes, as in those root pruned every year at Woburn, the death of the tree often follows. As a rule, undue growth is inimical to fruit bearing, so that root pruning or tree lifting affords a means of prometing fartility: but there is a consider affords a means of promoting fertility; but there is a considerable difference between the two operations. The lifting and The lifting and replanting, even if performed with the greatest care, give a more decided check than root pruning alone without disturbing the tree. At Woburn the greater number of the trees have been both lifted and root pruned, though in the later years there was little to cut from the roots, as growth had become stunted. With small trees, too, lifting is a simple operation; with large ones ordinary root pruning without removing the tree is all that can be attempted. It must, however, be said that in many soils apples on Paradise stocks rarely need such treatment at all, though for both apples and pears on free stocks it may be desirable at times. Similar treatment of fruit trees on free desirable at times. Similar treatment of fruit trees on free stocks might yield important results in promoting earlier fruit

COCK-FIGHTING, ANCIENT $\ensuremath{\mathfrak{C}}$ MODERN.

EW sports can show a pedigree of more respectable antiquity than that of "cocking." Some 2,400 years ago, in the time of the great philosopher Confucius, the Chinese not only practised cock-fighting, but had already elaborated their contests by the use of metal spurs; and all through Chinese history fragments of verse are quoted in which the poets sing the glories of successful cocks. A thousand years later the Chinese emperor who is popularly supposed to have "invented" small feet for women distinguished himself, we are told, by "his cock-fighting propensities." He used to give public entertainments in the spring of each year at the ancestor-worshipping festival, and in order to keep an adequate supply of game-cocks he established a sort of mews the neighbourhood of his own palace. Here 500 boys were steadily employed in training and feeding 1,000 cocks. Cock-fighting is to our English minds a thing so essentially connected with the young bucks of the Regency, with Corinthian Tom and Jerry Hawthorn, with the cock-pits immortalised for us by Hogarth and Rowlandson, that it tayes the imagination not a little to Rowlandson, that it taxes the imagination not a little to conceive pig-tailed Chinamen of 200 B.C. crowding to watch the public cock-fights given by a "cocking" emperor. These annual diversions of the Celestial stand akin, in time at least, to the earliest known Greek cock-fights, for these were matters of annual observance, claiming no less than a great historic significance. For all those who have seen Athens, and for many to whom the

Dear city of men, without master or lord, Fair fortress and fostress of sons born free,

is but a vision of antique perfection and of modern ruin, the great theatre of Dionysos takes a dominant place, whether in the traveller's memory or the day-dream of the scholar. The amphitheatre stands now sufficiently revealed by the spade of amphilite states how such that the explorer to show us the ancient encircling seats of stone and marble, and the central stage whereon the tragedies of Sophocles and Æschylos, and the comedies of Aristophanes, held the Athenian audiences enchained. Pre-eminent among the marble seats of honour stands the chair of the priest of Dionysos, marble seats of honour stands the chair of the priest of Dionysos, adorned outside and within by delicate sculpture in low relief; satyrs bear bunches of grapes, Oriental figures war with heraldic lions, and, most delicate and beautiful of all, on the outside arms of the chair is—a cock-fight. On each side a young winged boy is setting down a cock ready for combat. What means this, to our minds, strange conjunction of priest and sport, drama and cocking? To consider that question fully would be to write a monograph on comparative religion. Here we can but note in passing that "a cock-fight was to the ancient mind a more solemn function than with us," and that a law at Athens enacted solemn function than with us," and that a law at Athens enacted that an annual cock-fight should take place in the theatre, to be paid for at the national expense. This observance was said to be commemorative of the great national victory over the Persians at Salamis. For, says Ælian, when Themistocles was leading the Athenian army against the Persians he saw some cocks fighting, and, stopping his troops, spake thus to them: "These animals fight not for the gods of their country, nor for the meaning of their encestors page for where page of their encestors. the monuments of their ancestors, nor for glory, nor for freedom, nor for their children, but for the sake of victory, and that one may not yield to the other"; and by means of this topic he inspirited



ANCIENT VASE PAINTING.

the Athenians. This derivation of the annual Athenian cockfight is varied in other authors, who would have it that the great general took an omen of success from the crowing of cocks; and yet again, in the cautious thought of modern science,

suspecting here but ætiological explanation "after the event." Be this as it may, the symbol of the game-cock fighting "but for the sake of victory" has its appeal for Englishmen (when untainted by a peace and plenty policy) no less than for the heroic Greeks of Salamis. The cock, an old writer tells us, on account of his vigilance, conjunction with his magnani-mous and daring spirits," was sacred to Mars, adding that others besides Themistocles have taken advantage of the sight of cock-

fighting, and from thence have drawn an argument for the incitement and encouragement of military valour. Thus incitement and encouragement of military valour. Thus Socrates himself endeavoured from thence to inspire Iphicrates

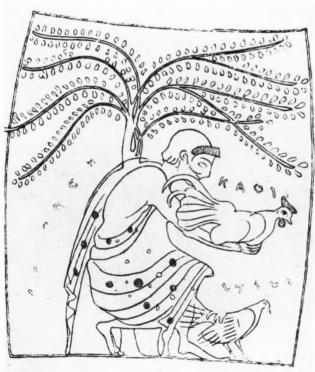
with courage. We gather that this annual Athenian cocking lasted but for one day, the cockpit being the theatre. From the conversation of Socrates, above referred to, it may be argued that the Athenians, besides the public shows of the festival, would "often match a pair of cocks one amongst another, as the barber Meidias appears to have fought a main with Callias." The islanders of Delos, it seems, were great cockers, and Rhodes, Media, Tanagra, and Chalcis are all enumerated as famous for "their enumerated as famous for "their generous and magnanimous race of chicken." "If one may judge," says the eighteenth century writer already quoted, "of the rest from the fowls of Rhodes and Media, the excellency of the broods at that time consisted in their weight and largeness (as in their weight and largeness (as the fowls of those countries were heavy and bulky) and of the nature of what our sportsmen call Shakebags, or Turn-pokes." This writer concludes that the Greeks had some method of preparing the birds for battle by "feeding" (the "feeder" was, in old English cocking speech, the person who gave the bird his last training, food, and care). It is recorded that a breed of hens at Alexandria, called Movóσοροι, produced the



400 B.C.

tells us, about the fighting of their quails and cocks. Severus, coming to Britain with his son Geta, died at York; and this cocking quarrel of the ancient Roman prince, a sojourner in Britain, finds an oddly-illustrative echo in the person of a unique

Roman enamelled bronze fighting-cock, found in London. Silvery and green in tint, this Roman warrior of the cock-pit stands 5½m. high, the iris yet retaining a bright gold, and the comb traces of red. Sir A. W. comb traces of red. Sir A. W. Franks dates this British relic as of the time of the Emperor Hadrian. Cock-fighting in England (one cannot think of Roman Britain as England) can be traced back to the twelfth century. FitzStephen, a writer of the reign of Henry II., describes cocking as a sport for schoolboys on Shrove Tuesday: "Every year on the morning of Shrove Tuesday the school-boys of the City of London bring game-cocks to their masters, and in the fore part of the day, till dinner-time, they are permitted to amuse themselves by seeing them fight." In the reign of Edward III. cocking became a fashionable amusement, but was prohibited in 1366 by a public proclamation, in which the sport was ranked as an idle and unlawful pastime. A cock-pit was among the additions made by Henry VIII. to the palace at Whitehall; and at the close of the sixteenth century, Stowe writes: "Cocks of the game are yet cherished by divers men for their



A HANDLER OF OLD GREECE.

best fighting cocks. It is noticeable that upon two beautiful gems from the collection of Sir William Hamilton, in one of which two cocks appear in the posture of game-cocks engaged, the birds apparently fight full - feathered.

In Roman we China again taking an imperial place in the history of cock-fighting; for an Emperor of China, who reigned from 32 B.C. to 8 B.C., used to go out incognito, disguised as the servant of one of his favourites, "in order the more freely to gratify his love for cock-fighting." Imperial Rome was not to be outdone by the Celestial Empire, for the sons of the Emperor Severus, Basseanus, and Geta quarrelled in their

pleasures, much money being laid on their heads when they fight in pits, whereof some are costly made for that purpose." M. de la Boderie, French Ambassador to James I., tells us that James constantly amused himself with cock-fighting twice a week; and the following quaint petition to the King has been preserved: ". . . I humbly beseech your most excellent majestie, that when youre most gratious disposition shall be pleased to see the sports of cock-fighting your highnes wolde vouchsafe me youre humblest servaunt to attend your royall greatnes in those pleasing sportes. For well understanding the conditions of those pleasures I humblie commend the best of my service to your highnes in them." In 1632 a patent appointed Sir Henry Brown Cock-master General, ad officium prefectur. Gallorum pugnantium, with a salary of £20 per annum. We have a vivid little picture of cocking at this period in a Harleian MS. of the reign of James I., entitled, "Merry Passages and Jeasts." The "jeast" in question would not quite commend itself to the honour of modern sportsmen. "Sir Thomas Jermin," says the MS., "meaning to make himself merry and fool all the cockers, sent his man to the pit in Shoe-lane, with an hundred pounds and a dunghill cock, neatly cut and trimmed for the battle; the plot being well layd the fellow got another to throw the cock in, and fight him in Sir Thomas Jermin's name while he betted his hundred pounds against him; the cock was matched, and bearing sir Thomas's name, had many betts layd upon his head; but after three or four good brushes, he showed a payre of heeles: every one wondered to see a cock belonging to sir Thomas cry craven, and away came the man with his money doubled."

craven, and away came the man with his money doubled."

Old illuminated manuscripts, according to Strutt, frequently afford representations of cocks fighting; but, he adds, "I do not recollect to have seen in any of them the least indication of artificial spurs." We are able, by the courtesy of the present possessor, to reproduce a beautiful pair of old English fighting spurs, and to show them bound in position on the foot of the bird. It is on record that Van Dyck painted the cock-pit at Whitehall as it existed in the time of Charles I. The picture represented two cocks fighting, and a large assemblage of courtiers watching the match. According to Timbs, the Whitehall cock-pit, after the fire of 1697, was altered into the Privy Council Office, the cock-pit retaining "its original name long after



AN OLD ENGLISH JUG.

the change in its uses." Even down to the year 1760 the Treasury was called the Cock-pit, and till quite late in the eighteenth century the Treasury minutes and letters were headed "Cock-pit."

The recent and modern days of cock-fighting are familiar to all lovers of the sport. Rowlandson shows us the eighteenth century cock-pit, and its eager audience. Hogarth recalls the partiality of Royal sportsmen for the game-cock, but prudently,

as behoves a loyal subject; for if the figures in the plate be searched sign of the Prince is among them, the fact of the august presence being discreetly conveyed by His Royal Highness's shadow, flung across the pit. Of all eighteenth c e n t u r y cockers none perhaps was better known than the cock ing Earl of Derby. Lord Derby's breed formed one of the best strains of game-fowls, the Lord Derby variety being Blackbreasted



READY FOR ACTION.

Reds, marked by a grey eye, and some white or grizzled feathers in wings or tail, or both. "No breed of fowls was better in the pit ... one was noted as the victor of no less than nine encounters." These beautiful birds, fine in form, graceful in carriage, and with a bright and fiery eye, had, a writer of 1853 records, then been kept at Knowsley for upwards of 100 years. In late times the headquarters of the sport for London was the cock-pit in Horseferry Road, Westminster, the London cocking generally beginning soon after Shrovetide.

Against the various objections to cock-fighting, the good sporting spirit in which all social divisions are for the moment disregarded may be urged to the credit of this ancient game, at any rate as described early in the last century. "A Cock-pit," says Pierce Egan, ". . . . is free for every person; and selection of company is entirely out of the question. The noble lord, and seedy commoner, are both at home, after they have paid their tip for admission; and persons who enter the pit to sport a crown, bet a sovereign, or to put down their pounds, are too much interested upon the Main to consider who they may chance to 'rub against' for the time being. Etiquette has nothing to do with the Cock-pit; and a master of ceremonies would have a trouble-some time of it." To recall the phrasing of the old cockers' petition to James I. this "pleasing sporte" was alike for the "humblest servaunt" and for "royall greatnes." To an age where class distinctions tend perhaps to undue severance we commend at least this aspect of the cock-pit.

G. M. Godden.

LITERARY NOTES.

N illustrated edition of The Fern Paradise (The Country Press) reminds one of the earnest efforts of the author, Mr. Francis Heath, to rekindle a general love for the spleenworts, hart'stongues, and the hundred other ferns which give beauty to the English hedgerow and woodland. It is a chatty, pleasant book, revealing perhaps no great depth of botanical knowledge, but pointing out the many ways in which ferns may be used, such as in windows, aquaria, or wherever, in fact, this beautiful race of plants will flourish. The illustrations are not very striking, and some of them seem quite old friends, but the book is thoroughly worth reading by those who are interested in fern life. The following remarks about the royal fern indicate the general character of the information: "Of royal and noble aspect, indeed, is the Royal or Flowering Fern. It is the largest and grandest of our native species, and approaches more nearly than any other to the form of a tree fern. Its favourite habitats are the banks of moorland streams, where it can secure abundant mcisture, and a soft, spongy, peaty soil. Oftentimes it is found in damp woods, growing in such situations to an average height of 4ft., 5ft., or 6ft. It is, however, found in greatest luxuriance in parts of Ireland; and on the banks of the lakes of Killarney it sometimes attains a height of 12ft., and presents a singularly grand and beautiful aspect. The root-stock in most of our native ferns is seldom raised more than a few-inches above the surface of the ground; but in the case of the Royal Fern its root-stock,

somewhat after the manner of the tree ferns of the tropics, is, in large species, raised to a height of 1st., or even 2st., above the ground, thus forming a kind

of pedestal for its tufts of tall and arching fronds."

Mrs. Watson has a delicate understanding of the particular charm of flower and herb. She does not, in depicting her garden, give you large splashes of colour "in oils," but rather outlines in silver-point the beauty of a single blossom chosen here and there, and this, too, though there are in her latest book, *The Heart of a Garden* (The De La More Press), masses of colour skilfully blotted in, as when she describes her carnation border, with its soft blots of coral and cherry, or the place where her sweet williams grow. It is not over the sweetness of these, however, that one pauses in reading to see them more clearly, with "that inward eye which is the bliss of solitude," but rather over the beauty of a maiden crocus in a frock "lavender striped, for all the world like an old time dimity gown"; or ever the pearllike buds of the bramble: "With what exquisite beauty are those awkward brambles clothed! Perfect of scent and form, in tone and colour neighbouring a faintly rose-flushed pearl, to know it is certainly to love it, and instantly to overlook its eccentricities, were they twice as many or as great. It is at its best, of course, in bud, for the fully opened flower, delightful as it is, loses that implicit loveliness which informs the folded petals with the faint blush of a pink pearl above, and, at the base, a dim, an almost indistinguishable stain of green." On another page is a clear and delicate drawing of a peach tree in bloom: "To-day, against the dull amaranths and rich, dim roses of the old wall, these sharp, pure notes of pink that spangle the slender network of rich bronze twigs and branches, touched here and there with tender green, seem full of pleasant promises and instant beauty,"

If we quarrel with Mrs. Watson for her hard words about the rose we

If we quarrel with Mrs. Watson for her hard words about the rose we confess to love, the pale Gloire de Dijon, yet we forgive her a few pages further on because she says a good word for some old favourites that are much despised nowadays—the orange and lemon marigolds "stiff as grenadiers," the moonflowers and the sunflowers, with their fair device, Lux tua vix mea, and last, the fuchsia, for whom with us, too, "still an ancient kindness stays, and still we look with mild unreasoned pleasure upon the slim little pendant blossoms with their short, purple petticoats and bright slashed crimson slips." Interspersed among these garden discourses are several poems; they show a tender gift for dreaming in, and expressing very sweetly, that sweet mood "when pleasant thoughts bring sad thoughts to the mind." These lines to the thrush are, perhaps, her happiest:

Poised on the summit of the deodar A song-thrush sings, this mild mid-winter day; Sings of the Spring, although the Spring is far And far away.

Infinite solace falls with every note, And dead dreams flower again the while he sings, My Angel with the throbbing speckled throat And dim brown wings.

Among London's sights, the Zoo is, perhaps, with our country cousins, of the most popular. Londoners bred and born value it no less. Thus, one of the most popular. then, the fact that Mr. Henry Scherren, an acknowledged authority in matters zoological, has written a book—The History of the Zoological Society (Cassell)—wherein those who will may find the history of the

birth and growth of this famous collection of animals, will be hailed with pleasure-at least, by those who can afford to buy it. Mr. Scherren's book comes at a most opportune moment, inasmuch as, for the gardens of the Zoological Society, a new era has dawned—one which has been ushered in with an unprecedented activity on the part of the governing body, and a manifestation of interest on the part of the public that is no less striking: a real, living interest, as may be seen by a reference to the large increase in the number of Fellows since this era began. It will probably come as a surprise to many to learn that the Zoological Society is an offshoot of the older Linnæan Society. This is Mr. Scherren's contention, and it seems to have some foundation in fact. Briefly, the evidence is as seems to have some foundation in fact. Briefly, the evidence is as follows: Certain of the Fellows of the Linnæan Society more interested in zoology than botany founded a Zoological Club for the purpose of furthering the advance of their favourite study, this end being, they realised, impossible of accomplishment in the society itself. A few years later the club was dissolved, the president at the last meeting claiming that "we have been the embryo of that higher body which has now sprung into perfect form." The Zoological Society has come to rank as one of the foremost of the world's scientific societies. The public, at times, are apt to regard the Zoological Gardens as their property, as though they were a State-supported institution, such as the British Museum, for example. This is not so, and it will be a bad day for British zoological science when the mere catering for the public is allowed to dominate the society's work—it will also be an infringement of the society's charter.

In its early days the society was much more of a private society than now, the public being admitted only on Mondays and Tuesdays, without the Order of a Fellow, on payment of 1s.; but about 1848 the gardens were thrown open every day except "promenade" days, which were strictly private. The abolition of all Fellows' days, save Sundays, was a step in the right direction, since it not only largely increased the income of the society, and so enlarged its powers of advance, but it also helped to spread a love of natural history, which is steadily growing to-day. In those early days the scope of work undertaken was wider than now, since it was the intention of the founders to effect improvements in the breeds of domesticated animals and to introduce new breeds. To this end poultry shows were periodically held, prizes were awarded, and hybridising experiments were carried on. A museum was also established. But the economic work and the museum both disappeared under the rule of Dr. Philip Sclater, who for more than forty years controlled the society's destinies. We do not wish to imply that this surrender is to be regretted. Dr. Sclater, during his reign, did more than many of us realise to make the society what it is to-day. He brought the gardens to a state of perfection that lost nothing by comparison with the rest of the zoological gardens of the world, and he secur d for the periodical scientific meetings of the society a renown no less universal. In the earlier days the society kept a farm at Kingston Hill, which served the the earlier days the society kept a farm at Kingston Hill, which served the purpose of a sanatorium, an experimental breeding station, and a place for duplicates; but this was soon abandoned Perhaps, in the near future, we shall see this adjunct to the gardens revived. We know of no means more likely to foster this good end than the perusal of Mr. Scherren's book. It should be read by every Fellow and every new Fellow joining the society, for thus he will be placed in possession of all the facts regarding its gradual growth, as well as of a store of information as to the introduction of new and rare animals, and notes on their habits, and thereby useful bits on how and what to observe will be accided. useful hints on how and what to observe will be gained,

SHOOTING.

EXCELLENT PARTRIDGE PROSPECTS. NHE shooting season is over, as regards the creatures within the pale of the game laws; but perhaps the most interesting time of the shooting year is only now about to begin for the man whose interests are not restricted to the mere firing of the gun, but range over the big subject generally. It is a time when a good deal of most useful work may be put in on the partridge ground. Prospects for the partridge-shooting season never looked brighter, so far as one can estimate them at this time, when even the laying of the eggs is in the rather remote future. A very fine stock has been left in most places all the country F. E. R. Fryer, writing from the great partridge counties of East Anglia, expresses a fear that here and there the future stock may have been injured by too keen and injudicious shooters continuing to shoot after the pairing of the birds, which took place rather unusually early this mild winter. It is a well-known fact that when paired birds are driven it is almost always the hen that comes first. Therefore, some argue, if only the second bird in each pair is taken, the hen is not injured. But, as Mr. Fryer points out, to suppose that sparing the hen in this way is of any assistance to the brood of the next season, involves misunderstanding of the manner in which the domestic life of the partridge is conducted. When birds have once paired, it hardly ever, or never, happens that if one of the pair be killed the other finds a new mate that season. The consensus of opinion of all observers worth paying attention to that this is the case is quite conclusive. You may put it shortly, that if you kill one of a pair, the survivor does not assist to increase the population until the following pairing season. The effect of shooting after the birds have paired has been actually proved, by very sad experience, at many places, and notably at Longford, where they shot at the end of one January, with the result that the stock did not recover from the effects for three

The calculation was easily made by comparing the results on the beat that had been thus shot so late in the year with others adjacent to it which had not been so treated. Granted, however, that this piece of supreme unwisdom has not been generally committed, the stock left ought to be a very fine one. One correspondent, writing from the Six-mile Bottom country, but with special reference for the moment to the birds in the northeast of Norfolk, expresses a doubt whether even too large a stock has not been left in some places. A superfluity of this kind does now and then occur, but it is, as a rule, only after two or three very good partridge years in succession, and that is not at all the state of our present case. Last year was a wonderfully good one, but it was the first good one for several years. So we may probably take it that if the stock left is anywhere too large, it will be only in very exceptional places, and places that have been very lightly shot. Here and there, too, and also very exceptionally, the partridges suffered from local causes. About the end of June and beginning of July there were some heavy, but local, thunder-storms in the Eastern Counties; and where these caught the birds on lands where the water could not run off quickly there was a great destruction. On the other hand, looking at the country as far West as the partridge extends in any considerable numbers, we find the birds very locally suffering from drought. This occurred in parts of Dorsetshire, where they are beginning to have a very good stock of birds; yet in the neighbour county of Wiltshire, up on the high land of Rushmore and the surrounding properties, the bags were record ones.

With regard to the work on the ground for which the present season is the "psychological moment," as they say, Mr. Fryer writes: "Now is the important time to kill all vermin. Rats can be easily poisoned, as food is scarce; and it is a great thing to kill them down before breeding-time commences. This also applies to all other vermin, except

the hedgehog, one of the worst for eggs, which must be watched for later on when he wakes up out of his winter sleep. There is one very important matter which keepers are inclined to be careless about at this time of year—that is, 'bushing' the land. The bushes put out in the autumn have mostly been removed in the cultivation of the land and never been replaced. Partridges are very easily netted while in pairs, and one pair at this time of year is worth more than a whole covey in September. One has only to think of the great and increasing traffic in live partridges to realise the enormous danger of leaving the fields unbushed. On the best preserved estates in the Eastern Counties there is, I think, a better stock of partridges left than I ever remember, and with the greater care that they receive now at the hands of keepers there is every prospect of big bags another year; but of course the weather in June may upset the best regulated estate, and no care can prevent this." Mr. Fryer writes with the experience of many years, as one of the best, perhaps the best, partridge shots in England, and also of one who did a great deal of the practical work of keeper for many years on his own property in the Eastern Counties; and that he should be able to speak of "a better stock than I ever remember" is indeed good.

The most hopeful point of all is that the optimistic view

prevails so generally, and indeed, with the very few and local exceptions indicated, universally. All up the East Coast right to Aberdeenshire, and Westward to the Somersetshire borders in

places of the birds were more and more restricted; and lately the fashion has come in of clearing out the ditches at a very early date, so that the chances of the birds finding a good shelter for their nests are still further limited. Besides these, which are rather local causes, the Lothians have suffered their due share in the more universal influences that have been suffered their due share in the more universal influences that have been unfavourable to the East Coast partridges for several seasons previous to 1905. Last year, however, they enjoyed their share of the greatly-improved general conditions, and the partridge bags were much better again. Taking Archerfield itself as an instance, it yielded a much more satisfactory result, in the way of partridges, to Mr. H. de Paravicini, who had it last season, than it had done the year before to its then tenant, Captain M. Laing. A good stock is left in the Lothians generally, and there is reason to hope that the improvement will be maintained.

MINIATURE-RIFLE-SHOOTING.

That this special branch of rifle-shooting is making satisfactory progress may be gathered from the report of the National Rifle Association, which states that eighty-one new miniature-range rifle clubs became affiliated to the association in the course of last year. The warning words of Lord Roberts and his appeal to the patriotism of his fellow-countrymen should surely come home to us all. It is in this connection that the encouragement of miniature-rifle-shooting becomes more than ever desirable, for, owing to the extreme rifle-shooting becomes more than ever desirable, for, owing to the extreme accuracy of these weapons, the cheapness of the necessary ammunition, and the comparative shortness of the range required, many people are readily induced to take up miniature-rifle-shooting who would otherwise remain in complete ignorance of the use of a rifle. Hitherto a "miniature rifle" has been what may be termed an "undefined quantity," and it seems highly desirable that some attempt should be made to arrive at the definition of a standard "miniature rifle," which should combine simplicity, strength, and



IN THE WILDS OF DONEGAL.

the South, and to Cheshire and Shropshire further North, good hopes prevail. Granted fair weather at the crucial dates, next season should be a "bumper" one.

"WALKING UP" IN THE LOTHIANS.

THE shooting of Archerfield is, or until very lately was, to let, a shooting of partridges in big fields of big roots very typical of the Lothians, with coverts which will hold as many pheasants, reasonably speaking, as you may choose to put into them. It was for many years in the hands of the late Mr. John Penn, M.P. for Lewisham, and he used then to get very good bags, walking up the birds. Driving is very little practised in the Lothians. It is said that the big fields make it difficult to manage, and certainly the low and closely-clipped thorn fences which prevail there give very little shelter for the gues. Doubtless this is a trouble that might be overcome the low and closely-clipped thorn fences which prevail there give very little shelter for the guns. Doubtless this is a trouble that might be overcome by putting up hurdles, but the big fields would still remain as a source of difficulty in bringing birds forward. They are apt, when the fields are so big and the covert is so thick, to pitch in the same field in which they are put up and to decline to come forward again. Still, at Gosford and one or two other places in that country they manage to drive the birds; but in the Lothians generally the tradition and sentiment of the keepers are all against driving, and perhaps this is a more potent reason of its slight success there than all the test put together. than all the rest put together.

High Farming and Partridge Nesting.

In old days the Lothians were very famous, for their partridges—it is true that the general standard of bags was not nearly so high as it is now but they have been through some evil times since. Rats have been a great pest in some seasons, and have decimated the birds. The trend of modern farming has always been towards an ever closer cropping of fences that were always pretty closely cut, in that land of high farming, so that the nestingaccuracy, and be procurable at a popular price. This subject has come under the notice of the National Rifle Association, and the thanks of a large section of the rifle-shooting public are due to Major Oxley, whose admirably-framed schedule on the subject was officially announced to have been accepted in its entirety by the council of the association at the Winter Meeting, held at the Royal United Service Institution on Tuesday, the 6th inst. According to the regulations so laid down, there are now two classes of miniature

Class A.—Any breech-loading rifle complying with the following conditions: Weight of rifle, maximum 8lb. complete as when firing; calibre, maximum '325; pull of trigger, minimum 4lb.; sights, any except telescopic

or magnifying.

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Ammunition.—A. Indoors: With a bullet not exceeding 8 ogr. in weight; observed velocity must not exceed 1,200 foot-seconds over 20 yds. (energy equivalent, 222 foot-pounds). With bullet exceeding 8ogr. but not exceeding 100gr. in weight; observed velocity must not exceed 1,000 foot-seconds over 20yds. (energy equivalent, 256 foot-pounds). B. Outdoors: Weight of bullet, maximum 140gr.; observed velocity, 1,450 foot-seconds over 20yds.

These definitions of miniature rifles and of the ammunition to be used in them appear to be very comprehensive and admirably thought out. It will

be noticed that in section (4), Class B, it is provided that the V of the back-sight, when in position for aiming, is not to be less than $23\frac{1}{2}$ in. from the heel of the butt—the same measurement is to be found in the new short Lee-Enfield rifle, except in the case of those which have exceptionally long stocks—and the provision is a wise one, as it is, practically speaking, impossible to make good shooting with an open back-sight which is too near to the eye. It is probable that gunmakers will not find much difficulty in turning out a miniature rifle especially adapted for shooting with open sight.

THE "SUB-TARGET" GUN MACHINE.

A correspondent writes to enquire as to the working of the "Sub-target" gun machine, and also wishes to know if the machine is really of practical value as an aid to becoming an expert rifle-shot. To the latter portion of his enquiry there can be no hesitation whatever in replying most emphatically in the affirmative. We have tried the machine in every position; errors in aiming, some of which were done on purpose, were invariably recorded with unfailing accuracy, and the actual position of the rifle when the trigger was pulled clearly indicated. This is a point the importance of which is patent to every marksman. A man may in effect have his rifle correctly aimed on the bullseye, elevation, windage, etc., all in order, but at the psychological moment when the trigger is released he may have "pulled" to the right, the mountent when the trigger is released ne may have "pulled" to the right, the muzzle may have dropped the fraction of an inch, there may have been an infinitesimal tremor, with its corresponding "wobble" of the rifle, and the shooter is puzzled when perhaps an "outer" is the result of his shot. The little "Sub-target," however, is there, and a glance at it shows exactly why the shot was a failure. To the novice or indifferent "shot" the machine is of incalculable value, for not only is the faulty position at the actual moment of firing registered, but until the trigger is actually pulled, the instructor can observe the slightest movement of the rifle, as recorded on the "Sub-target," and can warn the shooter of his errors, while being able at the same moment of time to point out the necessary corrections in elevation and direction. We are not singular in our opinion of the merits of this machine, which is actually in use in the Navy, at the Marine Barracks at Chatham, Portsmouth, and Devonport, at the Royal Military Colleges, in a large number of regiments, and in several of the leading schools and colleges. With regard to the principles and working of the machine, we propose to give illustrations and details in the immediate of the machine, we propose to give intustrations and details in the immediate future. Should our correspondent, however, not be in a position to see the machine at work in his own neighbourhood, he will find one established in working order at Messrs. Wilkinson's Sword Company in Pall Mall, and may rely upon receiving a lucid explanation of the working and application of the apparatus from Mr. B. Atwood Robinson, President of the Sub-Target

TURNING DOWN PARTRIDGES.

For all practical purposes the shooting season is a thing of the past, and it is almost time to turn one's attention to preparations for the future. In places where from one cause or another such a course is advisable, it is time to consider the question of turning down fresh strains of partridges, and it is certainly encouraging to those who may meditate trying the benefit of this plan to hear that wherever it was tried in Norfolk and Suffolk the results have been satisfactory. But whatever the strain of new birds may be, it should be a *sine quâ non* to make quite certain before turning them out that they are young, vigorous, and perfectly free from disease. It is not altogether easy to do this, but perhaps the best method to employ is to pay a fair price, and to place one's self in the hands of a thoroughly respectable dealer and importer. Most of the game farmers and dealers connected with the Game Egg Guild are perfectly trustworthy, and the probability is that any one of them, if apprised beforehand of the purpose for which the birds were required, would do his best to ensure their delivery in good condition. On arrival the birds should be kept for a few days in a suitable pen, such as a pheasantry, and well fed before being turned out.

CORRESPONDENCE.

BREEDERS AND TYPES.
[To the Editor of "Country Life."]

SIR,—I have read the letter of your correspondent "J. B. W." with great interest, as it deals with a topic which interests me greatly. The tendency interest, as it deals with a topic which interests me greatly. The tendency to breed for show points is no doubt a recurring danger to many breeds of dogs. The bloodhound is a striking instance of this. Wrinkle and flew have been exaggerated until the dog is like a tadpole—all head and no body. Shoulders, legs, feet, back, loins, and quarters, all important points in a working hound, have been sacrificed. The association of working bloodhound breeders only just came in time to prevent the bloodhound becoming hound breeders only just came in time to prevent the bloodhound becoming as hopeless a mover as the bulldog. I remember well the attempt to form a pack on the lines of the old Southern hound. The reason of its failure was that the hounds so produced had not sufficiently good shoulders to go up and down the hills of the country in which they were worked. There is, as "J. B. W." rightly remarks, nothing new about complaints as to want of nose and tengue in the modern hound. A hundred years ago there was a treat reaction graphs towned in the forward. great reaction against tongue in the foxhound. No doubt the old-fashioned hounds dwelt on the line, and rejoiced over the scent in the way the rough otter-hound does now; he is, I take it, almost the most direct representative we have of the ways and music of the old Southern hound. The desire for speed induced such breeders as Sir Thomas Mostyn and Mr. Osbaldeston to go to the other extreme, and their packs ran almost mute. The Belvoir, which owed a good deal to both these kennels, has had the same fault more than once during its history. In the first instance it was remedied by the introduction of Badminton blood. I imagine that no kennel had more of the old Talbot blood than the Badminton. They had square heads, coarse coats, and a slight tendency to throatiness even down to our own time; this represents the old staghound type from which the Duke of Beaufort's hounds were derived. The Heythrop, which was an offshoot from Badminton, retained rather throaty and very musical hounds into modern times, and I can recollect them in my Oxford days. Again, in the seventies, Frank Gillard, then them in my Oxford days. Again, in the seventies, Frank Gillard, then huntsman to the seventh Duke of Rutland, noted the want of tongue, and it was partly his endeavour to remedy this that caused him to hit on the line now so well known as that of Weathergage, Gambler, Dexter, Dasher, etc. The sketch of which your correspondent writes is very interesting, for the late sixties were, in fact, one of the periods of silence. With regard to throaty hounds it is very difficult to go back, but there are continual instances of reversion to the "neckcloth" which was commoner once than now, and these hounds are nearly always superior in nose and tongue to the rest of the pack. have only once seen a working pack of bloodhounds, and then it struck me that they packed badly, and had not the mutual trust and confidence or remarkable in the foxhound. But the bloodhound is naturally a tracker. I have sometimes wondered, however, whether a foxhound could not be trained to hunt the clean boot as well as the bloodhound. I wish somebody with the leisure, which I have not, would try it and record the results in Converne Levy. COUNTRY LIFE. -X.

ESPERANTO.
[To the Editor of "Country Life."]

SIR,—Will you of your courtesy allow me space to correct a curious misapprehension. The gentleman who had a schoolboy for his caddie at Ranelagh probably did not know that the boy's Esperanto knowledge could not have come out of the taxpayers' pockets. So far, in the schools where Esperanto is taught both teachers and students are volunteers, and even the schoolroom is not always utilised, for some of the lessons have been given in

the open air. As regards the possible use to a boy who belongs, I suppos the open air. As regards the possible use to a boy who belongs, I suppose, to the elementary school; in the first place Esperanto is used in such schools as training for the mind in the same way in which Latin is in higher-paid schools, with this addition, that being a Modern language the boy has a chance of enlarging his geographical knowledge by its means, and his technical also. For example, one such lad wanted a special question answered; he sent out post-cards in Esperanto to fourteen different countries, and received the replies, which were very valuable, in due course. Think what it would mean for agriculture if a farmer could arrange beforehand some special cultivation, and so prevent surplus of certain crops and shortage of others. The writer also speaks of middle-class schools, but only a small number of The writer also speaks of middle-class schools, but only a small number of such have Esperanto lessons as yet in England, though in France there are about a thousand in which it is taught, and where it stands in the same category with shorthand. The reason for teaching it in towns is that some few of our teachers have forethought, and there is already a demand for clerks who know Esperanto.-E. A. LAWRENCE, Hon. Secretary of the London Esperanto Club.

THE SIENESE SCHOOL OF PAINTING

[TO THE EDITOR OF "COUNTRY LIFE."]

SIR,—I have been asked by the Commissione Senese di Storia Patria to make a catalogue raisonné of pictures of the Sienese School in Great Britain and Ireland. In the course of some years' search, I have succeeded in finding in this country about 130 Sienese paintings. I shall be deeply grateful to any of your readers who possess pictures of this school, or have knowledge of such works, if they will communicate with me. All letters may be addressed to me at 110, Piccadilly, W .- R. LANGTON DOUGLAS.

THE WATER-VOLE.

[To THE EDITOR OF "COUNTRY LIFE."]
SIR,—The water-vole, often misnamed the water-rat, commonest and most interesting of our native mammals. He is to be found on commonest and most interesting of our native mammals. He is to be found on almost all our streams, rivers, and ponds, with his sleek, soft fur, chubby head, and jet black eyes, reminding one somewhat of a miniature beaver. It is a curious thing that, save in certain cases, this animal does not seem to increase in anything like the rapid manner that the rat does, so as to become a regular plague to the district. He has many enemies; the fox, the otter, the stoat, and the heron all levy toll upon his family, and where there are big pike at hand, these also appreciate him as a savoury morsel. He is chiefly herbivorous, living on leaves, roots, bulbs, etc., and I have known water-voles do a great deal of harm in a garden, where they eat out all the newly-growing crowns of a variety of lilies. They are also fond of apples, and I have seen them swimming across a stream pushing an apple in front of them. It is very rarely that they touch either fish or fry; but they are often wrongly blamed for this, the real damage being perpetrated by the ordinary common rat, which in the summer-time frequently takes to the streams and ponds, living in the banks, and being almost as much at home in the water as its cou-in the vole. The differences between them are not easily recognised by the ordinary observer. If obtained young they can be easily tamed in confinement, and make by no means uninteresting pets. I once saw a pretty and interesting sight in connection with these animals. I was sitting on the bank of a small stream, which was being dammed up for the purpose of sheep-wasting, and I suddenly saw a water-vole come out of a hole in the bank that was being

the hedgehog, one of the worst for eggs, which must be watched for later on when he wakes up out of his winter sleep. There is one very important matter which keepers are inclined to be careless about at this time of year—that is, 'bushing' the land. The bushes put out in the autumn have mostly been removed in the cultivation of the land and never been replaced. Partridges are very easily netted while in pairs, and one pair at this time of year is worth more than a whole covey in September. One has only to think of the great and increasing traffic in live partridges to realise the enormous danger of leaving the fields unbushed. On the best preserved estates in the Eastern Counties there is, I think, a better stock of partridges left than I ever remember, and with the greater care that they receive now at the hands of keepers there is every prospect of big bags another year; but of course the weather in June may upset the best regulated estate, and no care can prevent this." Mr. Fryer writes with the experience of many years, as one of the best, perhaps the best, partridge shots in England, and also of one who did a great deal of the practical work of keeper for many years on his own property in the Eastern Counties; and that he should be able to speak of "a better stock than I ever remember" is indeed good.

The most hopeful point of all is that the optimistic view

prevails so generally, and indeed, with the very few and local exceptions indicated, universally. All up the East Coast right to Aberdeenshire, and Westward to the Somersetshire borders in

places of the birds were more and more restricted; and lately the fashion has come in of clearing out the ditches at a very early date, so that the chances of the birds finding a good shelter for their nests are still further limited. Besides these, which are rather local causes, the Lothians have suffered their due share in the more universal influences that have been unfavourable to the East Coast partridges for several seasons previous to 1905. Last year, however, they enjoyed their share of the greatly-improved 1905. Last year, however, they enjoyed their share of the greatly-improved general conditions, and the partridge bags were much better again. Taking Archerfield itself as an instance, it yielded a much more satisfactory result, in the way of partridges, to Mr. H. de Paravicini, who had it last season, than it had done the year before to its then tenant, Captain M. Laing. A good stock is left in the Lothians generally, and there is reason to hope that the improvement will be maintained.

MINIATURE-RIFLE-SHOOTING.
That this special branch of rifle-shooting is making satisfactory progress may be gathered from the report of the National Rifle Association, which states that eighty-one new miniature-range rifle clubs became affiliated to states that eighty-one new miniature-range rifle clubs became affiliated to the association in the course of last year. The warning words of Lord Roberts and his appeal to the patriotism of his fellow-countrymen should surely come home to us all. It is in this connection that the encouragement of miniature-rifle-shooting becomes more than ever desirable, for, owing to the extreme accuracy of these weapons, the cheapness of the necessary ammunition, and the comparative shortness of the range required, many people are readily induced to take up miniature-rifle-shooting who would otherwise remain in complete ignorance of the use of a rifle. Hitherto a "miniature rifle" has been what may be termed an "undefined quantity," and it seems highly desirable that some attempt should be made to arrive at the definition of a standard "miniature rifle," which should combine simplicity, strength, and



C. Reid, Wishaw, N.B.

THE WILDS OF DONEGAL.

the South, and to Cheshire and Shropshire further North, good hopes prevail. Granted fair weather at the crucial dates, next season should be a "bumper" one.

"WALKING UP" IN THE LOTHIANS.

THE shooting of Archerfield is, or until very lately was, to let, a shooting of partridges in big fields of big roots very typical of the Lothians, with coverts which will hold as many pheasants, reasonably speaking, as you may choose to put into them. It was for many years in the hands of the late Mr. John Penn, M.P. for Lewisham, and he used then to get very good bage, walking up the birds. Driving is very little practised in the Lothians. It is said that the big fields make it difficult to manage, and certainly the low and closely-clipped thorn fences which prevail there give very little shelter for the guns. Doubtless this is a trouble that might be overcome by putting up hurdles, but the big fields would still remain as a source of difficulty in bringing birds forward. They are apt, when the fields are so big and the covert is so thick, to pitch in the same field in which they are put up and to decline to come forward again. Still, at Gosford and one or two other places in that country they manage to drive the birds; but in the Lothians generally the tradition and sentiment of the keepers are all again. driving, and perhaps this is a more potent reason of its slight success there than all the rest put together.

HIGH FARMING AND PARTRIDGE NESTING.

In old days the Lothians were very famous for their partridges—it is true that the general standard of bags was not nearly so high as it is now—but they have been through some evil times since.

Pest in some seasons, and have decimated the birds.

The trend of modern farming has always been towards an ever closer cropping of fences that were always pretty closely cut, in that land of high farming, so that the nestingaccuracy, and be procurable at a popular price. This subject has come under the notice of the National Rifle Association, and the thanks of a large section of the rifle-shooting public are due to Major Oxley, whose admirablyframed schedule on the subject was officially announced to have been accepted in its entirety by the council of the association at the Winter Meeting, held at the Royal United Service Institution on Tuesday, the 6th inst. According to the regulations so laid down, there are now two classes of miniature rifles-A and B.

Class A.—Any breech-loading rifle complying with the following conditions: Weight of rifle, maximum 8lb. complete as when firing; calibre, maximum '325; pull of trigger, minimum 4lb.; sights, any except telescopic or magnifying.

Class B.—Military (1) Any Service rifle or miniature Service rifle approved by the War Office with a calibre not exceeding '310, firing miniature ammunition as defined below. (2) Any Service rifle fitted with a Morris or other tube. (3) Any rifle of Service pattern but provided with a barrel bored, chambered, and rifled for the '22 short, long, or long-rifle rim-fire cartridge, the '297—'230 long or short Morris tube or any other miniature ammunition which has received the approval of the council. The bolt may be modified to fire and extract the cartridges, and the magazine may be omitted. (4) Any Class A rifle with a calibre not exceeding 310, provided that the general shape of the fore-sight and the notch in the back-sight are the same as those of a Government pattern rifle and that the V of the back-sight when in position is not less than $23\frac{1}{2}$ in. from the heel of the butt. The back-sight notch may be mounted so as to be capable of lateral adjustment in addition to the usual vertical adjustment. The fore-sight may only be adjustable to the extent of the usual driving fit of a dove-tail slot. Pull of trigger: Minimum, 4lb.; sights in (1), (2), and (3) must be the same as for the same pattern of rifle as issued for service, except (a) that the foresight may be made a driving fit into a dove-tail slot, or else that the backsight notch may be so mounted as to be capable of lateral adjustment; and (b) that the height and width of the fore-sight block may be of any

Ammunition.—A. Indoors: With a bullet not exceeding 80gr. in weight; observed velocity must not exceed 1,200 foot-seconds over 20yds. (energy equivalent, 222 foot-pounds). With bullet exceeding 80gr. but not exceeding equivalent, 222 foot-pounds). With bullet exceeding 80gr. but not exceeding 100gr. in weight; observed velocity must not exceed 1,000 foot-seconds over 20yds. (energy equivalent, 256 foot-pounds). B. Outdoors: Weight of

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A correspondent writes to enquire as to the working of the "Sub-target gun machine, and also wishes to know if the machine is really of practical value as an aid to becoming an expert rifle-shot. To the latter portion of his enquiry there can be no hesitation whatever in replying most emphatically in the affirmative. We have tried the machine in every position; errors in the affirmative. We have tried the machine in every position; errors in aiming, some of which were done on purpose, were invariably recorded with unfailing accuracy, and the actual position of the rifle when the trigger was pulled clearly indicated. This is a point the importance of which is patent every marksman. A man may in effect have his rifle correctly aimed on the bullseye, elevation, windage, etc., all in order, but at the psychological moment when the trigger is released he may have "pulled" to the right, the muzzle may have dropped the fraction of an inch, there may have been an infinitesimal tremor, with its corresponding "wobble" of the rifle, and the shooter is puzzled when perhaps an "outer" is the result of his shot. The little "Sub-target," however, is there, and a glance at it shows exactly why the shot was a failure. To the novice or indifferent "shot" the machine is of incalculable value, for not only is the faulty position at the actual moment of firing registered, but until the trigger is actually pulled, the instructor can observe the slightest movement of the rifle, as recorded on the "Sub-target," and can warn the shooter of his errors, while being able at the same moment of time to point out the necessary corrections in elevation and direction. We are not singular in our opinion of the merits of this machine, which is actually in use in the Navy, at the Marine Barracks at Chatham, Portsmouth, and Devonport, at the Royal Military Colleges, in a large number of regiments, and in several of the the Marine Barracks at Chatham, Portsmouth, and Devonport, at the Royal Military Colleges, in a large number of regiments, and in several of the leading schools and colleges. With regard to the principles and working of the machine, we propose to give illustrations and details in the immediate future. Should our correspondent, however, not be in a position to see the machine at work in his own neighbourhood, he will find one established in working order at Messrs. Wilkinson's Sword Company in Pall Mall, and may rely upon receiving a lucid explanation of the working and application of the apparatus from Mr. B. Atwood Robinson, President of the Sub-Target Gun Company.

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THE WATER-VOLE.

[TO THE EDITOR OF "COUNTRY LIFE."]
SIR,—The water-vole, often misnamed the water-rat, is one of the commonest and most interesting of our native mammals. He is to be found on almost all our streams, rivers, and ponds, with his sleek, soft fur, chubby head, and jet black eyes, reminding one somewhat of a miniature beaver. It is a curious thing that, save in certain cases, this animal does not seem to It is a curious thing that, save in certain cases, this animal does not seem to increase in anything like the rapid manner that the rat does, so as to become a regular plague to the district. He has many enemies; the fox, the ótter, the stoat, and the heron all levy toll upon his family, and where there are big pike at hand, these also appreciate him as a savoury morsel. He is chiefly herbivorous, living on leaves, roots, bulbs, etc., and I have known water-voles do a great deal of harm in a garden, where they eat out all the newly-growing crowns of a variety of illies. They are also fond of apples, and I have seen them swimming across a stream pushing an apple in front of them. It is very rarely that they touch either fish or fry; but they are often wrongly blamed for this, the real damage being perpetrated by the ordinary common rat, which in the summer-time frequently takes to the streams and ponds, living in the banks, and being almost as much at home in the water as its cousin the vole. The and being almost as much at home in the water as its cousin the vole. differences between them are not easily recognised by the ordinary observer. If obtained young they can be easily tamed in confinement, and make by no means uninteresting pets. I once saw a pretty and interesting sight in connection with these animals. I was sitting on the bank of a small stream, which was being dammed up for the purpose of sheep-wasling, and I suddenly saw a water-vole come out of a hole in the bank that was being

rapidly flooded carrying a very small young one in its mouth; this it conveyed across the stream, and deposited in a thick tussock of grass on the top of the opposite bank. Then it went back for another one, and so on, until the whole family of five were placed in a position of safety. Owls and hawks are very fond of them, and stoats will regularly work through their burrows, often actually going into the water in search of them. During high floods many of these animals are turned out of their holes, and have to take to the hedges and trees in the neighbourhood, where numbers of them fall victims to their numerous enemies. In a hard winter they are often

reduced to great straits, and are then frequently to be found in the turnip and mangel-wurzel pies They strip the bark off the willows, or any other tree or shrub that they can get at, in order to obtain food. In some parts of the country a beautiful black variety of this vole is to be found, and I have some very fine specimens of the same. The water-vole is easily distinguished from the common rat by its much stumpier appearance altogether—very chubby thick head and nose, shorter ears, tail, and limbs—and by its much denser and softer fur.— OXLEY GRABHAM.



your last issue, there was naturally a reference to the famous Ribston Pippin apple, which was first grown in the gardens there. As Major Dent points apple, which was first grown in the gardens there. As Major Dent points out in a supplementary note, it is not quite correct to say that the original tree is still standing. Major Dent's remark that "the tree now standing is fractically the original tree" may be, perhaps, more readily understood when I say that it is a sucker from the original. The latter was, of course, raised from seed, and therefore, unlike those which are grafted upon another stock, might be increased by means of suckers. As the existing tree arose actually from the roots of the original, this cannot be truthfully described as having died. I enclose a photograph which I took of this famous apple tree some five years ago, in case you may think it sufficiently interesting to reproduce. When, on that occasion, I had the pleasure of seeing the gardens at Ribston





Hall, the following summarised history of the apple was given to me: "Sir Henry Goodricke, being at Rouen in 1709, procured some fine-flavoured apples, the pips of which he sent to Ribstone. Three of them grew, but only one tree proved worth keeping—viz., the Ribston Pippin. The trunk of Pippin. The trunk of the old tree was blown down about 1828. The present tree is a sucker from the old roots, and there-fore true." Probably Sir Henry Goodricke had little idea of the real excellence of the variety he had introduced and the notoriety to which it would eventuaily attain. From the above short historical sketch it appears that the original tree was about 119 years old when it was blown

down. The present tree, therefore, is about seventy-eight years of age. At the time of my visit it continued to bear good fruit, and doubtless does so now. This old favourite apple is still in demand for garden culture, and trees grafted or budded on the Paradise or dwarfing stock are less affected by canker than those on the crab stock. It is suitable for all forms of garden trees, but it does not pay under orchard culture.—H. H. T.

MALFORMATION OF RABBIT'S TEETH. [To the Editor of "Country Life."]

SIR, -The enclosed photograph of a rabbit's skull may be of interest to you



The rabbit was shot last autumn near Eastbury in Berkshire, and was in good condition, notwithstanding the abnormal growth of the teeth. The righthand tooth in the lower jaw, which has been accidentally broken off and lost, was the same length as the remaining tooth. It is difficult to understand how the rabbit could have managed to eat, although it was in perfect condition when shot.-M. E. W. B.

A DOG STORY.

[To the Editor of "Country Life."]

Sir,—An incident in dog life has lately occurred at Venice, so rare that it might better be called an accident, and I send an account of it, in case you may think it would interest your readers. I remember in the thirties of last century the ridicule cast at Mr. Jesse, whose book on "Natural History" told the story of a dog that improvised milk for the sustenance of the puppies of a dead friend. His story is now mine. I have a family of dachshunds—there were father, mother, son, and daughter. This last, Bisa, had a coat of plush the colour of frosted silver, perfect manners, health, temper, and intelligence. When she was four and a-half years old I put her to a dog, but she died the day after whelping from exhaustion. Four large puppies were born dead, one, a very small one, alive. For ten days my wife and I fed this mite, dead, one, a very small one, alive. For ten days my wife and I fed this mite, every two hours by day, and three by night, with drops of cow's milk, sugared and bewatered. That tenth evening as it lay on my lap, the grandmother at my side showed such interest in the babe that I shifted it from my lap to hers. Granny made the mite's toilet in dog fashion, and the next day they looked so happy that I left them together for an hour. After that the baby refused cow's milk, and is now five weeks old, and the thriving, though very tiny, adopted daughter of her wet-nurse grandmother. The nurse is nine years of age; she has had three families, the last born eighteen months ago. At the time she has had three families, the last born eighteen months ago. At the time her daughter was mated she, too, was anxious to begin another family, but was prevented from so doing. Possibly then, as she would, if not interfered with, have had puppies of her own at the same time as her daughter, and would have supplied them with milk, the secretion of this was rendered more easy; but that is speculation. The fact, and it must be a rare one, is that a dog nine years old found milk for another's puppy eighteen months after her own last puppies had been born. - FREDERIC EDEN, Venice.